

THE AMERICAN NEPTUNE

A QUARTERLY JOURNAL OF MARITIME HISTORY



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OVER four and a quarter centuries ago Robert Thorne, a prosperous merchant of Bristol, England, was living in Seville. There he saw the luxury products of the Far East enriching Spain and Portugal and, being a patriot as well as a merchant, he thought that England should share in this lucrative trade. But unfortunately the seas were dominated by the greatly superior naval power of the Iberian nations and they would not allow other countries to trespass in their sea lanes.

One of Thorne's friends in Seville was Sebastian Cabot, Grand Pilot of Spain, whose father, John, had discovered the North American continent about thirty years before, and who himself had made a voyage searching for the Northwest Passage.

The theory of the Northwest Passage had been occupying the minds of explorers and traders and there had been several attempts to discover it. Thorne, in a letter to Edward Lee, the English ambassador to Spain, and another to King Henry VIII which was never delivered, outlined what seemed to him a better way. He pointed out the great commercial advantages to England of a short cut to China and the East, and then proceeded to point out that rather than a passage by the northwest, the shortest and most practical way was directly over the North Pole. In so far as distance went Thorne was, of course, correct. He pointed out that some people would object because of the great quantities of ice, but he believed the sea would open up as one approached the Pole and continued

with the remark that 'there is no land uninhabitable nor sea unnavigable.' Thorne's theory and influence on exploration was considerable and actually there were several attempts to sail to the East by sailing directly north, but unfortunately every one ran up against impenetrable ice.

We now salute the first ship to consummate successfully Thorne's theory. The ice was still there but on 3 August, last, U. S. S. *Nautilus*, the world's first nuclear-powered vessel arrived directly under the North Pole at 11:15 P.M. eastern daylight-saving time. Sailing submerged from Pearl Harbor via Bering Strait, she threaded her way through undersea canyons into the deep Arctic Ocean basin, cruised directly under the North Pole and surfaced, about thirty-six hours later between Greenland and Spitzbergen. The names of those who have tried to force the Northwest Passage read like a roll call of England's greatest seamen. It was, then, appropriate that the ancient haven of Portland, England, be the first port to hail *Nautilus* after her astonishing voyage from the Hawaiian Islands. For over eighteen hundred miles she swam beneath the polar ice pack guided by the most complex navigation instruments ever devised. Robert Thorne could not possibly imagine the type of ship that eventually carried out his perfectly serious suggestion, and perhaps opened the route via the North Pole to commercial submarines, which may some day be doing exactly what he suggested. The voyage of *Nautilus* will rank in history with the great sea voyages and explorations of all time, and henceforth her name and her captain, Commander William B. Anderson, will be mentioned in the same breath with Columbus and Santa Maria, Cabot and Matthew, and Cook and Endeavour. Today indeed, 'there is no land uninhabitable nor sea unnavigable.'

ERNEST S. DODGE

Peabody Museum of Salem



Early Great Lakes Steamboats

The Chicago Line 1838-1839

BY H. A. MUSHAM

THE Patriot War and the after effects of the panic made 1838 a year of troubles for the lakes. Nevertheless a certain amount of ship-building was carried on, no less than fourteen new steamers being completed or launched during the season, thirteen of them on Lake Erie and the upper lakes, all American, and one on Lake Ontario, a Canadian. This boat, *Queen Victoria*, had been under construction for some time by the Niagara Dock Company for James Lockhart. She was modeled by Robert Gilkison, built under his direct supervision, and launched on 3 March. She was 130 feet long, 23.5 feet wide with a depth of hold of 7.25 feet. The tonnage was 200. A 50-horsepower engine was installed.

The season opened with much uneasiness on Lake Ontario. Nevertheless the American steamers and thirteen of the Canadian resumed their services. The destruction of *Sir Robert Peel* on 29 May threw the steamboat owners in a panic. On hearing of it, Gilkison, fearing for the safety of *Queen Victoria* still fitting out at Niagara, threw a boom across the entrance to the yard to keep out raiding patriots.¹ She was completed in the first part of June and was tried out on the fourteenth. All of the Dock Company were anxious for her success, especially as to speed, in which he hoped they and the owners would not be disappointed. Two runs were made on the Niagara River from Niagara to Queenston. The upstream one was made in forty-two minutes, the other downstream, in twenty-five. The average speed was twelve miles an hour, a rate he noted 'which will render her the Queen of Lake Ontario, it is a feather in my cap and will add much to the credit of the company.'²

On Lake Erie and the upper lakes, the activities of the patriots had slight effect on shipping activities. But because of the hardness of the times, the movement of settlers to the west fell off and business declined.

¹ H. A. Musham, 'The Caroline Affair,' *THE AMERICAN NEPTUNE*, VII, No. 4 (October 1947), 309-311.

² Augusta Grant Gilkison, 'Early Ship Building at Niagara,' *Niagara Historical Society*, No. 18, pp. 30-31.

The land boom, however, was not a total loss. It had been beneficial to the upper lakes country. Between Detroit and the Mississippi, there were now about 400,000 people. Along the shores of the south half of Lake Michigan where in 1833 there had been but three little settlements, there were now sixteen, all located at the mouths of small rivers and all claiming to be ports. There were harbors at but three of them, Chicago, St. Joseph and Green Bay. Entrances to the others were blocked by sand bars.³ All of them were clamoring for improvements. Rafts, flatboats, yawls, and skiffs were used to land and load passengers and freight. In bad weather freight that would float and could not be damaged by water was thrown overboard to drift ashore and passengers had some anxious moments in landing from or boarding a vessel in the yawl. The new settlers were not as yet self-supporting and many of the necessities of life had to be brought in from the east. Consequently there was sufficient business to keep many of the steamboats in service regardless of the hard times.

Travel across the lower part of Michigan was still difficult. Of its grand scheme of public improvements, only short stretches of two railroads and some roads little better than Indian trails had materialized. The Erie and Kalamazoo Railroad was running steam trains from Toledo to Adrian, and the Detroit and St. Joseph had reached Godfrey's, now Ypsilanti, thirty miles west of Detroit on 5 February. Travelers bound west had to take the stage at the railheads to continue their journeys. Reaching Niles, those bound for Chicago could take a barge, small boat, or possibly a steamer down the St. Joseph River to St. Joseph at its mouth, or continue by stage around the lake, a long fatiguing ride of over a hundred miles, a large part of which was through country that at times was almost impassable. At St. Joseph, Oliver Newberry's schooners and occasional steamers from Lake Erie provided an uncertain service to Chicago. Regular steamboat service across the lake, though tried twice, had not been successful and had been given up. Nevertheless a small group of Chicago businessmen formed in 1836, and, consisting of John H. Kinzie, George W. Dole, Walter L. Newberry and Captain Pickering, succeeded in raising funds for another try at this venture. These men, young and progressive, had big ideas. They not only built one steamer, but two for this service and in this

³ Southport (Kenosha), Milwaukee, Wisconsin City (Port Washington), Sheboygan, Manitowoc, Two Rivers, Kewaunee. Rumors of gold deposits drew settlers to the last named. In addition to these, sawmills had been set up at Oconto and Menominee on Green Bay. Across the lake from Milwaukee, there was a wooding station (Grand Haven) at the mouth of the Grand River. To the south along the eastern shore were Singapore (Saugatuck) at the mouth of the Kalamazoo River, and New Buffalo in the extreme southwest corner of Michigan at the mouth of Galien River, and Michigan City at the mouth of Trail Creek. All of these settlements, especially Michigan City and Milwaukee, thought they would pass Chicago in the race to be the great city of the new west. Chicago now had a population of about 4,000, the others of but few people or a few hundred at most.

same year. The first, *James Allen*, 258 tons, the first steamboat built at Chicago,⁴ was launched in March at a yard on the North Branch of the Chicago River near the forks, the timber coming from farther north along that stream. Captain C. H. Case superintended the construction. She was intended to be fast enough to make a round trip between the two ports in daylight. She was enrolled at Detroit on 2 July 1839. The hull was narrow, sharp, and light in construction. She had two powerful, low-pressure, horizontal engines, built by William H. Stow at his shop on the South Branch of the Chicago River, which were placed on the guards. On her trial trip to St. Joseph, she left Chicago with full steam up and at a speed that pleased as well as astonished her owners, the first fourteen miles being made inside of an hour.⁵ Then the steam pressure fell, the engines slowed down and it took ten hours to complete the remaining 46 miles of the trip. Efforts were made to keep up the pressure but the boilers were too small for the demand made on them. Captain Pickering, her master, later remarked: 'she would run the first thirty miles like a skeered dog, then her speed would slack to about seven miles an hour, and nothing could coax her to do any better.'⁶

The other boat, *George W. Dole*, 162 tons, also built by Captain Case, was launched shortly after *James Allen* and was enrolled at Detroit on 3 August. She turned out to be somewhat more successful, running as a companion boat across the lake and along the shore to Milwaukee, Michigan City, and St. Joseph.

A line of steamboats in the early days was made up of two or more steamers, not necessarily under the same owners, who nevertheless agreed to maintain a regular service between the same ports. The Chicago Line was initiated this year by *Constellation*, Captain C. L. Gager, and *Pennsylvania*, Captain Lester Cotton. Regular fortnightly sailings between Buffalo and Chicago were scheduled, the first according to the card in the *Chicago Democrat* to be by the former on Friday, 25 May, and the last by the latter on Tuesday, 16 October. Chicago was delighted with this arrangement. Both boats had good passenger accommodations, space for carrying furniture, and a hold capacity of 2,000 barrels. The balance of trade was in favor of Buffalo, there being little as yet to ship east except small amounts of salt meats, hides, wheat, and furs. *DeWitt Clinton* and *Columbus* were also put on the run. All these boats visited Green Bay on the way west,

⁴ Shipbuilding began in Chicago in the spring of 1835 when the sloop *Clarissa* was begun then by Nelson R. Norton. It was not launched until 12 May 1836. A large number of spectators were present to witness the important event (*Chicago Democrat*, 18 May 1836).

⁵ Too high most likely.

⁶ A. T. Andreas, *History of Chicago* (Chicago, 1884), I, 241-242.

ran along the west shore to Chicago, stopping occasionally to land or take on passengers and freight. Leaving Chicago, they crossed to Michigan City, turned northeast to St. Joseph and the Grand River to wood up for the long run to Mackinac Island. According to Mrs. Elizabeth Therese Baird of Green Bay, 'The society on these boats was very good, consisting largely of ladies and gentlemen who were in search of new homes, and who seemed to be glad to meet with Western people. The boats were luxurious, nothing could be more comfortable, the tables were good, the servants also. One most important person on these stylish boats was the chambermaid, and one fared well who secured her friendship.'⁷

At Milwaukee, affairs were looking up. Its founders were planning to beat Chicago to the Mississippi with a long canal portaging from the Menominee to the Rock River and had secured a Federal land grant to help finance it. They also had a railroad to the river in mind. The only improvements that materialized this year were a wharf for small vessels built on the lake front by Laurent Solomon Juneau,⁸ just below the lighthouse erected the year before and the replacement of *Badger* by the lighter *Menominee* also built there.

Wood was still the only fuel available for the steamboats, though coal had been brought to Cleveland from mines in Ohio via the Erie and Ohio Canal as early as 1827. It could not compete with wood because of its cost and its unavailability at the other ports. The extensive forests that lined the shores, especially those of lakes Huron and Michigan appeared to be capable of furnishing an inexhaustible supply of cheap fuel. But wood for a day's run or longer occupied a large part of the hold and part of the main deck also on most boats, and it was a fire hazard. In fact the whole boat was a fire hazard. The roaring fires under the boilers, the long flames of the burning billets passing through the flues, and the breechings at times overheated decks and bulkheads. The sparks showering from the smokestacks which occasionally became red hot added to the dangers from fire. At night they had, at times, a picturesque but sinister appearance. Constant care was required to prevent fire and a special watch was kept for them.

There had been fires on the boats, some quite destructive, but none so far could be rated a disaster until *George Washington*—the second of the name—Captain W. N. Brown, burned in the early morning hours of 16 June, while on her second trip from Cleveland to Buffalo. The fire

⁷ Elizabeth Therese Baird, 'Reminiscences of Life in Territorial Wisconsin,' *Wisconsin Historical Collections*, XV, 251.

⁸ Indian trader and leading citizen of the settlement. He was highly respected and is generally regarded as its founder.

started beneath the boilers when near Silver Creek, about five or six miles offshore, at 3:00 A.M. Efforts were made to extinguish it but it spread to the bulkhead between the boilers and the gentlemen's cabin and was soon beyond control. The passengers were aroused and much confusion and distress followed. Some fainted, others went into convulsions on the deck. Captain Brown put his helm hard-a-port and made for the shore. The frantic passengers jammed into the yawl and demanded that the boat be stopped to launch it. While it was being lowered, one of the falls gave way and several of them were spilled into the lake. In the meantime the fire cut off access to the engine and it could not be started again. The flames burned the tiller ropes through and the stricken craft became unmanageable. It was now a matter of every one saving himself. Baggage and portable fittings were thrown overboard. The passengers followed, grasping anything in the water that would support them. The yawl picked up all that it could hold and started for the shore with twenty-five of them. The fire was seen from the shore, and three skiffs, all that could be found were manned and put out for the scene. They picked up a small number hanging on to floating wreckage. *North America*, also eastbound, was ahead of *Washington* having passed her earlier in the evening as she lay at Erie. The sudden glare on the western horizon was seen when about three miles from Buffalo by her steersman who at once informed Captain J. L. Edmonds. He immediately put about and made for the scene with all possible speed, reaching it about 6:00 A.M. There the hulk was still burning, but no living person was on board. The lake was covered with trunks, baggage, hats, bonnets, and charred fragments of the wreck. A line was put aboard and the hull was towed into Silver Creek where it was scuttled and sunk at the wharf, nothing but the charred framework of the wheelhouse remaining above the water. About forty survivors were taken aboard *North America*, which after picking up some of the floating baggage headed for Buffalo.

Washington, 380 tons, was new, having been built in the previous winter at Ashtabula. She was owned there and had cost about \$40,000. Her loss was a heavy blow to the town. About forty passengers and a few of the crew were lost. Captain Brown was among the saved. No blame was attached to him or the crew by the passengers.⁹ The heavy loss of life was charged to the use of hempen tiller ropes. Had iron rods been used instead, it is likely that he would have been able to beach her, and many if not all those lost could have been saved. But at that, with her low speed,¹⁰ it would have

⁹ *Niles National Register*, LIV (23 June 1838), 259.

¹⁰ *Washington* was a failure as to speed. On the trip up the lake she did not make anywhere near the speed expected by her owners.

taken more than a half hour to reach shallow water, and the fire could have destroyed a large part of her structure in that time forcing the passengers and crew overboard. If she had carried four lifeboats, with good management all on board could have been saved. According to Samuel Starkweather, Collector of Customs at Cleveland, the disaster was caused¹¹ 'by the most gross and criminal carelessness of those who had charge of the boat. The fire broke out under the hearths, or ash pans, which with the boilers, were placed on the bottom of the boat. By omission to cause water to be conducted under the hearths, or ash pans, the bottom of the boat took fire, and rapidly consumed the whole.'

This disaster coming on top of several which took place on the Mississippi and Ohio rivers earlier in the year, focused the attention of the country on the lack of safety regulations for the steamboats.¹² Several states had enacted them but could not or would not compel their observance on waters within their boundaries. The steamboat people, owners, masters, crew, and shippers were a powerful interest and opposed all efforts of Congress to make the steamboats safe for both passengers and freight. Reluctant as it was to enact suitable legislation, it now had to do it. Finally on 7 July, it enacted the first Federal law: 'To provide for the better security of the lives of passengers in vessels in whole or in part by steam.'¹³

¹¹ Executive Documents, 25th Cong., 3d. Sess., H. R. 1838-1839, Doc. No. 21, p. 335.

¹² Since 1816, there had been about 260 accidents due to the use of steam for navigation, of which 99 were boiler explosions and 28 were fires. (Executive Documents, op. cit., p. 4.)

¹³ Richard Peters, Esq., ed., *The Public Statutes at Large of the United States of America, from organization of the government in 1789 to March 3, 1845* (Boston: Little, Brown and Company, 1860), V, 304-306.

Synopsis of laws: All owners of steamboats on or before 1 October 1838, to make new enrollment of same under existing laws of United States, and take out from Collector or Surveyor of port where vessel is enrolled a new license under conditions of existing law and as shall be imposed by this act.

Hulls to be thoroughly examined for age, date of building and where built, length of time running, whether sound or not, seaworthy and fit to be used for the transportation of passengers and freight.

Boilers, engine and machinery to be thoroughly examined for soundness, fitness for use, and age.

Inspections of hulls to be made every twelve months.

Inspections of boilers, engine and machinery to be made every six months.

In case of neglect owners to be responsible for all damages to property of any passenger aboard occasioned by boiler explosion or derangement of machinery or engine of boat.

Safety valve to be opened on stopping and slowing down of vessel to keep steam down. Master made responsible and to be fined \$200 for every failure to comply.

Two longboats or yawls, each to carry at least twenty persons, to be carried by vessels not exceeding 200 tons. Three longboats or yawls of same or larger vessels to be carried by vessels exceeding 300 tons. Master or owner to be fined \$300 for every failure to comply.

Suction hose, fire engine and base suitable to be worked in case of fire, to be provided for every voyage and in good order. Iron rods or chains to be employed and used in place of wheel or tiller ropes. Master or owner to be fined \$300 for failure to comply.

One or more signal lights to be carried between sunset and sunrise. Master or owner to be fined \$300 for failure to comply.

Every captain, engineer, pilot or other person through whose misconduct, negligence or inattention to duty, the life or lives of any person on board may be destroyed to be deemed guilty of manslaughter, and on conviction thereof to be sentenced to ten years imprisonment at hard labor.

Inspectors of hulls, boilers, engines and machinery to be appointed by District Judges of the

This law was the beginning of the United States Steamboat Inspection Service. It proved to be weak and difficult to enforce. Some owners promptly complied with it, the first iron tiller rods and chains appearing in the fall of the year. Others opposed and even resented the law, claiming that its provisions, particularly those relating to iron tiller rods and chains, added to the hazards of navigation.¹⁴

It was a step in the right direction, but law or no law the owners and captains would and did take chances and the rivalry between steamers on the same run was keen. Captains raced their boats as occasion offered regardless of the risks involved and the passengers were not always averse to these trials of speed, but now and then one of them outraged by their heedlessness would rare up and tell them off in no uncertain terms. One C. A. Lord of New York, one such passenger on *Erie* on a trip from Buffalo to Cleveland, roundly expressed his indignation over one of these contests in a letter to the *Cleveland Herald*:¹⁵

American House.
Cleveland, July 31, 1838

Messrs. Editors:

I wish to avail myself of the columns of your paper for a word of caution to the travelling public.

After the many and melancholy disasters that have of late occurred in our steamboat navigation, I should suppose that respect for their own reputations would be a sufficient guarantee for the future discreet conduct of the officers of our steamboats.

But not so. The steamers *Buffalo*, Captain Allen, and *Erie*, Captain Titus, left Buffalo yesterday morning about 10 o'clock, the *Erie* ahead, and the two boats ran side by side for some time, and the officers of the *Erie* all the while changing baggage, ordering the passengers hither and thither to trim the boat—consuming pitch and afterward grease, and making every possible effort to keep ahead of the *Buffalo* but without success.

Again at Erie, the two boats started bow and bow, the *Erie* got aground in coming out, and the *Buffalo* kept ahead until dark, when the *Erie* came up and the boats continued side by side for another hour. The *Erie* passed while the *Buffalo* stopped at Grand River to wood, and in order to save time Captain Titus of the *Erie* landed the passengers for Cleveland at two o'clock this morning at the Beacon light on the end of the pier. Men, women and children were put off at the end of a narrow pier, 1200 feet from land—surf breaking over its entire length and this in the darkness of two o'clock at night. One passenger, an invalid on crutches, was obliged to wait there until morning because unable to hobble over the slippery planking too narrow to admit of a carriage to take him away.

United States and to be persons skilled and competent to make inspections of steamboats. They were not to be interested in the manufacture of boiler, engine or other machinery. They were to receive \$5.00 for each inspection, to be paid by the master or owner.

¹⁴ *Niles National Register*, LVIII, 128.

¹⁵ *Cleveland Herald*, 31 July 1838.

Such conduct on the part of the Captain of any vessel is highly reprehensible, and the public ought to be cautioned to avoid such boats and officers as show themselves so reckless of life, and regardless of public sentiment.

Nevertheless the race must have been exciting. The captains of *Erie* and *Buffalo* appear to have been much given to racing. On another occasion they took on *Cleveland*¹⁶ on a trip between the same ports and they both lost. That it was a thrilling race, is apparent from the following extracts of a log kept by a passenger on *Cleveland*:¹⁷

Left Cleveland at 8.15 a.m., at 10.19 we are 10 miles out. At 11.25, the *Erie* turns in to Buffalo. At 12.45, only one lady appears at the table—the rest are sick. 1 p.m., we have yet three holes in gauge not filled, or we have three links to let out. 7.30 p.m., wood running low. 7.55 p.m., scratching up everything that is wood. The fenders and berth bottoms go in. 9.55 p.m., at the dock in Buffalo with wood enough left to sell. We (the *Cleveland*) beat the *Buffalo* thirty-four and a quarter minutes.

The 176 miles between the two cities were covered at a speed of 12.8 miles per hour, fast going for this year and for some years afterward. It is evident that the boats were forced in this race, a dangerous practice at any time. Nothing was reported on what the owners of *Cleveland* said when they paid the bill for new fenders and berth bottoms. But racing must have paid in increased patronage and other ways or it would not have been tolerated by either owners or the traveling public. Passengers crowded on the fastest boats regardless of the risks that were taken and with some exception thoroughly enjoyed a race.¹⁸

On Lake Ontario these chances do not appear to have been taken as often as on the other lakes. There *Queen Victoria* was proving herself a success. On 28 June, the coronation of her namesake was celebrated by a party of sixty ladies and gentlemen from the Niagara district including Robert Gilkison, by a special trip from Niagara to Toronto. The 38 miles across the lake were made in three hours and seven minutes, or at a rate of 12.2 miles per hour. A delightful afternoon was spent in Toronto. After

¹⁶ *Cleveland* was the first steamer on the lakes to have a steam whistle. As applied to steamers it was an adaptation of the locomotive whistle reputed to have been invented by George Washington Whistler, railroad builder, graduate of the United States Military Academy and formerly Major, United States Army. He was the son of Captain John Whistler, builder of the first Fort Dearborn at Chicago in 1803-1804.

The steam whistle first appeared on the locomotive *Sandusky* of the Mad River and Lake Erie Railroad purchased by President James of the company in October 1837. (Alvin F. Harlow, *The Road of the Century* [New York: Creative Age Press, 1947], pp. 342-343.)

¹⁷ J. H. Kennedy, 'Early Marine Interests of Cleveland,' *Magazine of Western History*, II (1885), 459.

¹⁸ Passengers generally have strange and fixed preferences in boats and ships, one of which is for the fastest boat or one with two or more smokestacks, and another for a ship elaborated with fancy curves and curlicues, and owners are not altogether rational in such matters.

a pleasant dinner on the return trip, the party danced quadrilles with great spirit until Queenston was reached about eight in the evening, where part of the company landed, the rest returning to Niagara. In the evening the village was illuminated. Said Gilkison: 'I never passed a more agreeable day.' She was put into regular service on 2 July, under Captain Dick, on the Niagara-Toronto-Hamilton route leaving Niagara at 7:00 A.M., Toronto at 11:00 A.M., and Hamilton at 4:00 P.M., returning to Niagara at 8:00 P.M., making the whole trip in 10.5 hours, a rate of sailing, said Gilkison, not exceeded by any boat on the lake.¹⁹

Her owners had unbounded confidence in their new boat. They soon changed her route, advertising her on 12 July at Niagara as a daily conveyance for the remainder of the season to and from Lewiston, Queenston, Niagara and Toronto, leaving Lewiston every morning at eight o'clock and Toronto at 2:00 P.M. Connections were to be made at Toronto on Monday and Thursday with *William the Fourth* for Kingston and Prescott, at Niagara for the Rochester and Oswego steamers, and at Lewiston with the railroad cars for the Falls.²⁰ At Queenston travelers could take the stages for the Falls whence they could proceed the next day by the steamer *Red Jacket* from Chippewa to Buffalo, or by the railroad cars for Manchester. The advertisement continued: 'the *Queen Victoria* is fitted up in elegant style, and is offered to the public as a speedy and safe conveyance, having all the accommodations that passengers can desire, to whose comfort every attention will be paid.'²¹ But these fine services did not last very long, as the British authorities soon took her over for use in the Patriot War, and she became H.M.S. *Queen Victoria*. *Transit* and *Experiment* had preceded her into the government service.

The other Canadian steamers did not fare very well during the season. Some were laid up and the services of others disarranged. Such as were continued were far from satisfactory to travelers, and loud and deep were the complaints of the passengers about the incivility of the servants, the bad quality of the meals, the wines and spirits, though it was pretty generally admitted that things could be worse.²²

Business conditions had taken a turn upwards in the spring and the hard times improved sufficiently to permit completion of the new boats on which work had been stopped by the panic. The Patriot activities were

¹⁹ Gilkison, *op. cit.*, p. 31.

²⁰ The Buffalo and Niagara Falls Railroad which ran from Buffalo to Black Rock and Grand Niagara.

²¹ J. Ross Robertson, *Robertson's Landmarks of Toronto* (Toronto, 1896), II, 871.

²² *Ibid.*, pp. 870-871.

kept under fair control by the Federal government which hired steamers as required for patrol duty and the transportation of troops, the new *Illinois* being one of them.

Of the new boats this year, *Illinois*, built at Detroit by the Newberry interests especially for the Chicago trade, was the most noteworthy. Her dimensions were: length 205.5 feet, breadth of hull 29.2 feet, and depth of hold 13.1 feet. The tonnage was 755, making her the longest and largest boat built on the lakes to date.²³ As the length was near the limit for safe wooden hulls without special strengthening, the hull was stiffened by two high arches or trusses on the main deck, one of their first, if not their first application to lake craft. The engine was of the square low pressure type and had a cylinder of 50 inches diameter with a stroke of 10 feet. She had two boilers and two tall smokestacks. The wheels were 24 feet in diameter with buckets 10 feet wide. The model in general was that of the Lake Erie steamers, though the clipper bow had been abandoned in favor of a plumb stern. Considered all around she was a distinct advance in lakes steamers.

Another new steamer for the Chicago Line whose construction was followed with interest was *Great Western*, launched at Huron in July. Other steamers built this year and not mentioned heretofore were: *Lawrence*, 300 tons, American, built at Buffalo; *Vermillion*, 385 tons, American, built at Vermillion; *Lexington*, 363 tons, American, built at Black Rock; *Chesapeake*, 412 tons, American, built at Maumee City; *Osceola*, American, built at Grand Island; *Fairport*, 250 tons, American, built at Tecumseh; *Red Jacket*, 143 tons, American, built at Grand Island; *Vance*, 75 tons, American, built at Perrysburg; *John Marshall*, 51 tons, American, built at Perrysburg; *C. C. Troubridge*, 52 tons, American, built at Mouth of Kalamazoo River; *Owasheononk*, 46 tons, American, built at Mouth of Grand River, Lake Michigan; *Wabash*, 83 tons, American, built at Perrysburg.

This year was one of high water, the lakes levels being at their highest known elevations. Consequently groundings were few, only two being of a serious nature. In September, *DeWitt Clinton* bound for Chicago ran ashore at Mackinac. One man and several thousand dollars worth of goods were lost. According to a passenger,²⁴ it was common talk on board that the person whose watch it was, was gambling at the time. He spoke well

²³ *Illinois* was the second largest steamboat in tonnage yet built in this country. The largest was *Natchez* of 882 tons (or 127 more than *Illinois*), built in 1837, in Baltimore, for coastwise service between New York and Natchez on the Mississippi. Her length was 200 feet, five feet less than that of *Illinois*, breadth 29 feet, and depth of hold 16 feet. *Illinois* was not the longest steamboat in the country, several others of greater length but of less tonnage having already been built for service on the western rivers, the Hudson and Long Island Sound.

²⁴ *Chicago Democrat*, 26 September 1838.

of the captain and thought the consequences of this black legging were too serious to have it on the boat again. Nevertheless, when *DeWitt Clinton* left Chicago on her return trip she had a new master.

Other groundings were those of *New England* in the Detroit River, *General Brady* in the River Raisin, both in April. Those of *W. F. P. Taylor* near Michigan City and of *Erie* between Buffalo and Black Rock, both in September. On 3 November *New England* again ran ashore this time seven miles below Fairport, and in a terrific storm. She had 1,500 barrels of flour and seven tons of butter on board of which it was necessary to throw 500 barrels of flour and one ton of butter overboard to release her. The loss amounted to \$10,000.

Other accidents were the collision of *Buffalo* and *Commodore Perry* near Erie in April, that of *Cincinnati* and *Milwaukie* near Cleveland in May, and that of *Commodore Perry* and *Rochester* near Dunkirk. *Cleveland* was disabled on Lake Erie in May, and *Lexington* in September, near Buffalo. *Cynthia*, a small Canadian boat, running between Chatham on Thames and Amherstburg took fire on 6 October on the Detroit River two miles above Amherstburg and was run ashore. She was not too seriously damaged and was hauled off later and taken to Chatham for rebuilding.²⁵

The partial recovery from the panic reached its peak in October of 1838, but it proved to be temporary and 1839 opened with times becoming harder and harder. Immigration west recovered rapidly from the decline of the preceding year. The tide was swelled by numbers of settlers from Upper Canada. Dissatisfied with the treatment given them in the rebellion, they moved over to Michigan and some on to the prairies of Illinois and Wisconsin.²⁶ Shipbuilders did not fare so well as in preceding years. Nevertheless, eleven new boats were built, seven American and four Canadian. Of the American, two came out on Lake Ontario and five on Lake Erie; of the Canadian, three on Lake Ontario and one on Lake Erie. Of the five on Lake Ontario, three were small; only two, *St. Lawrence*, American, and *Ontario*, Canadian, compared with the larger boats on Lake Erie.

The Patriot War left considerable ill feeling between the Loyalist partisans and the Americans in its wake. Conditions remained threatening along the St. Lawrence and on Lake Ontario. There were several attacks on American ships well into the summer.²⁷ *United States*, now under command of Captain Whitney, formerly of Great Britain, were the pet

²⁵ Fred Coyne Hamil, 'Early Shipping and Land Transportation on the Lower Thames,' Ontario Historical Society, *Papers and Records*, XXXIV (Toronto, 1912), 51.

²⁶ H. A. Musham, 'Early Great Lakes Steamboats, The Battle of the Windmill and Afterward, 1838-1842,' *AMERICAN NEPTUNE*, VIII, No. 1 (January 1948), 39-46, 49.

aversions of the Loyalists. Because of attacks made on the former, she was taken off the river and operated along the American shore of the lake. As for little *Paul Pry*, she too was subjected to their spleen, and was taken out of the Ogdensburg-Prescott ferry service, and to Black River Bay on the lake, where she afterwards operated.²⁷ The usual routes were served across the lake as was the through route from Ogdensburg and Prescott to Lewiston and Hamilton. *Queen Victoria* was still in the British service on 7 April, manned by a large body of British tars and looking well, though she was soon to leave it.

Gilkison launched another steamer for James Lockhart on 22 April, *Gore*, which glided beautifully into the water. A large concourse of people attended the launch and everybody appeared gratified with the sight. His men kept it up by a dance in the evening at which he was heartily pleased with their conduct.²⁸ He surveyed *Queen Victoria* at Toronto on 8 May and found everything in good order after her six months in the government service. She was sold a few days later to Captain Hugh Richardson for £7,000, a price, said he, that will well repay Lockhart. On 12 May, Lockhart gave him a contract for another large steamer to be called *Niagara*.²⁹

The conquest of the St. Lawrence by steam had attracted the interest of John Hamilton and he had *Ontario* of 300 tons, the second of the name, built at Prescott by an American named White, for the express purpose of ascending the Long Sault Rapids. She was 210 feet long and had superior accommodations, but, like the others built for the same purpose, failed to do it.³⁰

Far away to the west, at Chicago, the season opened early. *George W. Dole*, overhauled and much improved, left for Michigan City on the morning of 8 April, and returned in the evening of the same day. The following morning she left for Racine and Milwaukee. Commented the *Daily Chicago American* for that day: 'she commences well, and we hope she will have plenty of business and good luck through the season.' On the eleventh, she steamed into the Chicago River carrying along with her cargo, \$600,000 in government money, receipts from public land sales at Milwaukee, for deposit in the local state bank.³¹

James Allen had also been given an extensive overhauling. Her engines

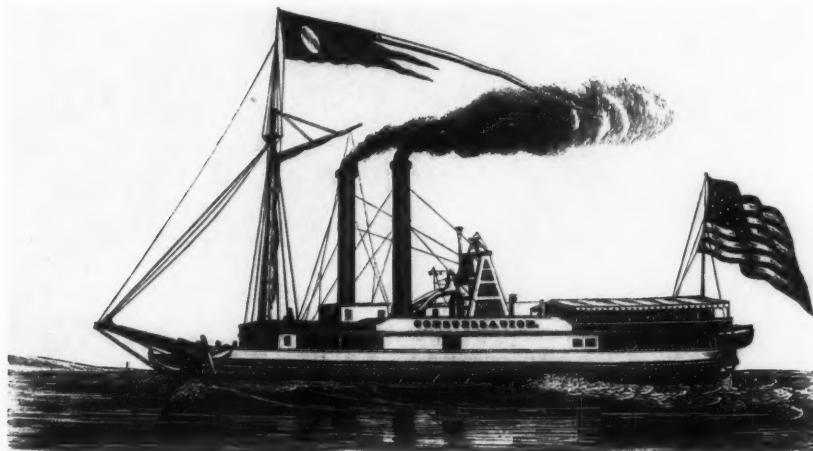
²⁷ S. W. Durant and H. B. Pierce, *History of St. Lawrence Co.* New York (Philadelphia, 1878), p. 136.

²⁸ Gilkison, *op. cit.*, p. 34.

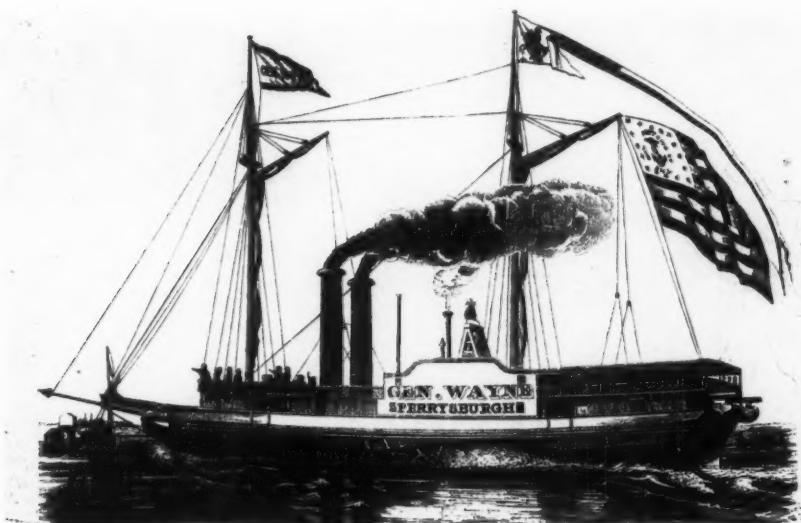
²⁹ *Ibid.*

³⁰ *Daily Chicago American*, 1 October 1839.

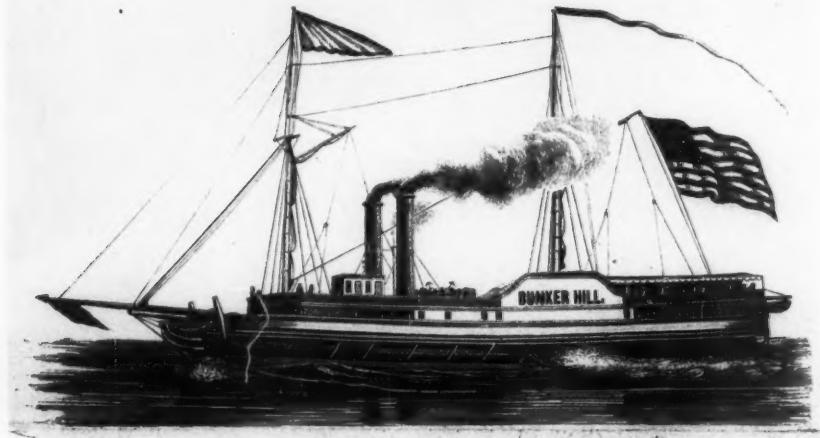
³¹ *Ibid.*, 11 April 1839.



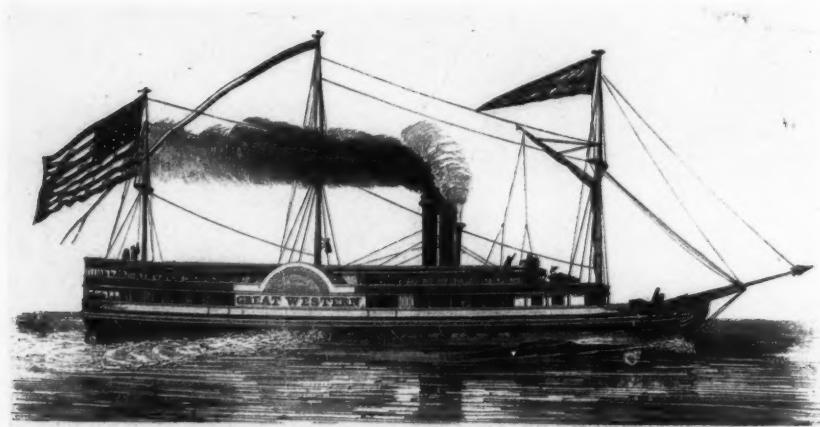
Constellation running on the Chicago Line
Courtesy of the Mariners' Museum, Newport News, Virginia



General Wayne running on the Chicago Line
Courtesy of the Mariners' Museum, Newport News, Virginia



Bunker Hill running on the Chicago Line
Courtesy of the Mariners' Museum, Newport News, Virginia



Steamboat *Great Western*, built expressly for the Buffalo-Chicago service.
The first steamboat to have a complete upper deck cabin
Courtesy of the Mariners' Museum, Newport News, Virginia

had been raised and larger side wheels installed, the work being done under the direction of an experienced engineer from the lower lakes, all with the intention of increasing her speed to that originally specified. Her freight capacity was enlarged by several hundredweight, the cabins repainted and the whole vessel put in fine style for the accommodation of passengers. It was thought she would be pronounced a 'crack boat.' Captain John Stuart, late of the brig *Manhattan*, her master, an excellent officer, answered her critics. Said he: 'let her have fair play, sea room, and plenty of business and she will plough the waves in a manner worthy of her name and city.'³² But the increase in speed was not attained and a misfit she remained.

Business was looking up in the city, the *Daily Chicago American* carrying notices through the month that *Thomas Jefferson*, *James Madison* and *Buffalo*, all belonging to the Reed line of Erie would be on the Buffalo-Milwaukee-Chicago line, with first arrival early in May and first departure on the tenth of the month. *Illinois* was also advertised for the same route, by Newberry and Dole, the first departure to be on 8 May. On the 27th, the *Daily Chicago American* reported that arrangements were being made to put two steamers on every three days from Lake Erie. The first steamer from Lake Erie was none of these, but *Columbus*, which arrived about 10:00 P.M. 30 April. Said the *American* for the next day, 'she was crowded with freight, on her way up and threw up "a heap," at Detroit and Green Bay. She did not bring a great many cabin passengers with her to Chicago, having left the greater part at Green Bay. She left Buffalo on the 21st, remained at Detroit a day, was detained by winds, at Green Bay for two days, which place she left on Monday morning last.'

Columbus beat *James Madison* in by one day. The *Daily Chicago American* for 1 May, rejoicing over the arrival of the latter: 'another boat from Buffalo. As far as we can judge from the present signs of the times, we are inclined to predict a prosperous season. What finer time—what better opportunities than this season presents, can immigrants tired or droning at the east, select, to wend their way to the west, the glorious west.' Two days later it noted with some anxiety: 'We learn from R. C. Bristol, Master of the *Madison*, that there are about nine feet of water on the St. Clair flats.'³³ Some doubt has been entertained that the largest class of vessels could not pass them,' but it added hopefully, 'we think good pilots will experience no difficulty.' April was a good month at Chicago, there being

³² *Ibid.*, 18 April 1839.

³³ The lake levels had entered in their decline of seven years occurring at the beginning of their 22.77 years cycle.

92 arrivals and 102 departures of schooners in addition to 10 arrivals and departures of steamboats, mostly by *George W. Dole*; 'a fair commencement,' said the *American* for 2 May.

On the morning of 8 May, the new *Illinois* was reported coming over the northern horizon, and the *American* for the same day spread itself in describing the event: 'our city was all life and animation this morning, and the docks crowded to witness the arrival of this magnificent boat on her first trip up for the season. She had a little difficulty this morning on account of her great size, in coming in the harbor, and stood off the pier a short time; but she soon came up in gallant style. She left Buffalo on the morning of the second—remained in Detroit a day and a half, and left there last Saturday morning. She came well freighted and brought about 100 cabin passengers, and one or two hundred steerage. We understand she had a rough and stormy time in Saginaw Bay, but that she rode the waves "like a thing of life," with admirable ease, quietness and beauty and won for herself the reputation with her other superior qualities of being a first rate sea boat.' However an unfortunate accident marred the success of this trip. Two men fell overboard in the blow and were drowned. Continued the *American*: 'she is truly a superb vessel—the pride of the lake—of her enterprising owner, and of the state which bears her name. . . . Her cabins and staterooms have an air of finish, elegance, taste and luxury, worthy of the palace of an Emperor. She is the largest boat on the lakes—propelled by a low pressure engine of the greatest power, and her speed is not surpassed by any boat on the lakes. In behalf of *Illinois* and her Queen City, we welcome her to our shores, and cordially wish her a long and uninterrupted season of good luck.' So enthusiastic was the editor that he proposed that the city present this fine steamer with a set of colors.

The interest in Captain Walker's *Great Western* matched that in *Illinois*. Early in May she was reported as not quite complete, and that she was to surpass everything on the lakes in speed, style, and accomplishment.³⁴ At this time, however, she was just about ready to leave on her first trip to Chicago where she arrived on 22 May. *Illinois* had come in the evening before on her second trip. The editor of the *American* almost burst with pride in reporting their arrivals.³⁵ Said he:

in these days of elegant and spacious steamboats that walk the mighty waters—unknown to oriental magnificence in its palmiest days of imperial sway—what editor can resist the sympathetic propensity of puffing? But if ever an editor in the discharge of his daily function, is excusable in taking this fiery contagion, he certainly

³⁴ *Daily Chicago American*, 4 May 1859.

³⁵ *Ibid.*, 22 May 1859.

is when announcing the simultaneous presence at our wharfs of two such magnificent and unrivalled steamers as the *Illinois* and *Great Western*. What city would not be proud of such arrivals? What high and conclusive evidence of the growing trade of the city and country does the appearance of such boats loaded down with freight, exhibit to the matter of fact man?

The *Illinois* arrived last evening about 6 o'clock. She left Buffalo on the 16th at 10.00 A.M. and lost 24 hours at intermediate ports. She left Milwaukee (90 miles distant) at 11 A.M., reaching Chicago in about 7 hours. These facts will abundantly establish her previous reputation of being decidedly the fastest boat on the lakes.

The *Great Western*, . . . made our harbor this morning about daylight having come by way of Grand River. She was built at Huron by her enterprising commander, Captain Walker, late of the *Columbus* and is pronounced the largest steamship on the American waters. Her dimensions and construction are as follows:

781 tons burthen
186 feet length of deck
34 " 4 inches beam
13 " depth of hold
27 " diameter of wheel,—with
60 staterooms
36 open berths in Gentlemen's Cabin
24 open berths in Ladies Cabins

The dining room and gentlemens cabin is on the upper deck, and including the saloon into which it may be extended at pleasure, is one hundred and twenty-five feet in length. The ladies cabin is on the lower deck, with a flight of stairs and carpeted hall leading to the dining room above; all finished and furnished in superb style. The accomodations for steerage passengers are ample and well arranged, they being literally on a level with cabin passengers. The cabin being above deck, leaves below an immense hold or space for freight and fuel, superior we should judge to the *Illinois*. The *Great Western* is owned chiefly in Buffalo and Huron, runs to G. S. Hubbard & Co., forwarders of this city, and is built for the Buffalo and Chicago trade, touching at intermediate ports. Whatever opinion may be entertained of the comparative merits of the two boats, (and all can now judge for themselves,) the *Great Western* is deservedly a work of great honor and pride to her accomplished commander, one of the oldest and most experienced navigators of the lakes. The *Illinois* though of 26 tons less than the *Great Western* is we think superior in her general finish, style, beauty and comfort.

The *Illinois* we pronounce the most elegant boat—the *Great Western* the most profitable. Those who prefer the Mississippi style of deck cabins, will of course give precedence to the *Great Western*. But, as for us, we are inclined to the opinion, that, in the drawing-room beauties of rich arrangements and elegant complexions of color, which, form the tout-ensemble, the Queen vessel of the State whose proud name she bears, doth indeed excel.

The officers and crew under Captain Blake the *great and popular*, move with the harmony and neatness of clock work in their respective spheres, and all is merry as a marriage bell. But why in describing the *Great Western* and the *Illinois* seek to 'paint the lily or add perfume to the violet.' May both meet with good wind and weather in a long voyage of prosperity.

Great Western was owned by Wickham, Walker and Company of Huron. She was planned and built there by Captain Augustus Walker of the firm, according to what he believed a steamboat for the Chicago trade should be, and at a cost of \$110,000.³⁶ Her distinctive feature was her passenger accommodations, which were placed on the main deck and in a long deckhouse on an upper deck extending from close to the stern rail almost to the bow in Mississippi River style. While other steamers had upper-deck cabins, *Anthony Wayne* among them, they were partial only. *Great Western* was the first to have a complete one. The nautical experts disapproved this departure from accepted practice and croaked about her seaworthiness.

Another distinctive feature was her machinery. She had seven long boilers of small diameter placed in battery across the hold. The engine of high pressure type with a cylinder 30 inches in diameter and a stroke of 10 feet, and rated at 300 horsepower was built in Pittsburgh and was reported as the largest of the type in the country. The side wheels were 27 feet in diameter with buckets 10 feet wide. All considered, she was a distinct advance in lake steamboat practice, a new model, which like *Great Britain* of 1830, made past numbers out of the others in service.³⁷

Canadian practice appears to have favored two engines, each driving a side wheel independently of the other, American one only. *Michigan*, once the pride of the Newberry fleet, but now belonging to the Lake Michigan Steamboat Company, James Abbott of Detroit, President, was one of the few boats on Lake Erie and the upper lakes that had two such engines. They had not worked out as well as expected. Slight differences of revolutions would cause her head to swing off. In heavy weather, her rolling put one wheel deep into the water slowing down its engine. The other wheel would be but lightly immersed or even out of the water, and the engine would race. The result was that she wobbled along in a most erratic manner. To correct this tendency, one of the engines was removed this year and the other connected to a single shaft carrying both wheels. She ran more steadily afterward but at a slower speed.³⁸

Of the two new American steamers on Lake Ontario, *St. Lawrence* and *Express*, the former alone was of importance. She was built at Oswego by George Weeks, ship carpenter, for Henry Fitzhugh of that city, Gerrit Smith of Peterboro, and E. B. Allen and Henry Van Rensselaer of Og-

³⁶ Ibid., 27 April 1839.

³⁷ H. A. Musham, 'Early Great Lakes Steamboats, 1816 to 1830,' AMERICAN NEPTUNE, VI, No. 3 (July 1946), 211.

³⁸ *History of the Great Lakes, Illustrated* (Chicago: J. H. Beers, 1899), I, 639.

densburg, and for the Lewiston-Oswego-Ogdensburg route. Her length was 180 feet, breadth, 23 feet, and the depth of hold 11 feet. The tonnage was 402. She was the longest steamer on the lake. Her two engines of the horizontal type came out of *Oswego*,³⁹ acquired by her owners the preceding year. Her first trip was made on 29 May under Captain John Evans of New York City. He was not well acquainted with the navigation of the lake or of the St. Lawrence in particular. This proving an objection, Captain Van Cleve not having a berth, since losing command of *United States* the previous November, was directed to take her over at any point most convenient to meet her. This he did on 20 September.⁴⁰

The 'Western Fever' was taking hold again. Business at Buffalo was reported as unusually brisk with a very large number of arrivals by lake and canal. The amount of goods and the number of passengers had never been greater.⁴¹ At Chicago, business boomed. While there was little as yet to export, the imports were large in amount. Colonel L. C. Kercheval, deputy collector and inspector, reported 101 arrivals for the month of May, 30 steamboats, 2 ships, 3 brigs, and 66 schooners. The *Daily Chicago American* for 1 June bragged: 'we have now a steamboat from the lower lakes almost once a day. The *General Wayne* left us last night and the *Constellation* came in its place. The *Buffalo* advertised to Buffalo for Chicago on the 24th; but on arriving at Detroit, in consequence we learn, of the new steamboat arrangement, returned again.'

The combination, also referred to as the consolidation, was a resumption of the steamboat association which went out of business in the flush year of 1836.⁴² It was agreed to by the owners at Buffalo in the last week of May. All the larger boats on Lake Erie, about twenty-nine in number, were placed in the pool or cartel. Membership was on a share basis by boats, each one being given a certain number for the season according to its assessed value. There was a total of 1,500 shares. A uniform scale of prices was prescribed for the season to which each boat was bound to adhere. Accounts were rendered monthly to a committee and the profits of all were divided in proportion to the number of shares held. There was to be no cutting under of passenger fares and of freight rates. Boats were to leave at regular intervals from Buffalo and Detroit, two each morning

³⁹ The hull of *Oswego* was sold to Canadian owners who fitted her out as a schooner. She was lost north of South Bay Point, Lake Ontario.

⁴⁰ James Van Cleve, 'Reminiscences of Early Sailing Vessels and Steamboats on Lake Ontario,' manuscript in Chicago Historical Society, p. 92.

⁴¹ *Daily Chicago American*, 1 June 1839.

⁴² *Ibid.*, 6 June 1839.

and two each night. Boats were to go to the upper lakes as required. Time was to be allowed at each port to handle freight and provide every luxury for passengers. Prices agreed upon were:

Passenger:⁴³

Buffalo to Cleveland:	Cabin	\$6.00	Steerage	\$2.50
" " Detroit	"	\$8.00	"	\$3.00
" " Chicago	"	\$20.00	"	\$10.00

Freight:

Buffalo to Chicago:	Light,	100 pounds	27½ cents
" "	Heavy	" "	62½ "
" "	Barrel bulk		150 "
" "	Silver Creek, Dunkirk, Barcelona;	25 @ 35 cents	
" "	Erie, Grand River, Cleveland;	27 @ 40 cents	
" "	Ports above Cleveland-Detroit;	30 @ 46 cents.	

It was expressly understood, no person was to be employed to solicit freight or passengers, unless immediately connected with vessel. Officers and men were to be chosen for ability, good habits, acknowledged merit and discrimination. Altogether it was a fine monopoly to regulate the steamboat business of Lake Erie and the upper lakes which was generally approved by the lake ports, as it would insure some regularity of service. But, said the *Daily Chicago American* of 30 May, 'this among other experiments of the day remains to be tested by experience of the public, as well as steamboat proprietors. In these days of disposition to travel, and increase of new boats—which will not necessarily be bound by the arrangement—it will be the policy of this association to put the rates of fares and freightage as low as they can afford,'⁴⁴ which it did not do.

The combination put *Constellation*, *General Wayne*, *Thomas Jefferson*, *New England*, *James Madison*, *Great Western*, and *United States* in the Chicago Line.

There were to be departures from Buffalo and Chicago every two days for the season, the first from the latter place being on 6 July and the last 18 October.⁴⁵

To keep up schedules, fast trips became the order of the day, one of which was reported by the *American* for 22 June 1839 as: 'FAST SAILING—We notice by the Buffalo papers that the steamboat GENERAL WAYNE made her last trip between Chicago and Buffalo, a distance of

⁴³ Rates by sailing craft were about 25 per cent less.

⁴⁴ *Daily Chicago American*, 30 May 1839.

⁴⁵ *Ibid.*, 20 July 1839.

about 1,000 miles,⁴⁶ in the space of eighty-five hours including stoppages. So long as she makes such speed, we trust no one will find fault with us for saying that travel will be a good deal on the wane!

But this was the record. That had already been set by *Illinois* late in May, when the same trip was made in 60 hours.⁴⁷ *Illinois* was not in the combination and ran as an independent boat, as did *North America*.⁴⁸

Cleveland, which claimed to be the fastest boat on Lake Erie, made a run from Cleveland to Buffalo in 14 hours, and on another occasion, one from Detroit to the same port in 21 hours and 38 minutes.⁴⁹ Shortly afterward *Buffalo* made it in 19 hours⁵⁰ and carried the broom for the rest of the season. On Lake Ontario, *St. Lawrence* ran from Oswego to Lewiston, at night in a heavy gale with the sea breaking over her continually, in 12 hours and 7 minutes.⁵¹ ⁵²

Captain Walker of *Great Western* was having his troubles in convincing the public of the seaworthiness of his fine steamer. Give a ship a bad reputation especially in regard to her stability as the smart fellows did to her, and it will stick throughout her existence. But the *Daily Chicago American* rallied to her defense. Said that wide-awake journal for 27 July 1839; 'an idea has gone abroad that because her cabins are above deck, she is not a safe sea boat. This we are assured by persons who have been aboard of her in heavy gales is not the fact. Her immense breadth of beam, the shape of her hull, and the weight of her boilers and machinery in the hold; render her perfectly steady and stiff even without freight—but when she carries freight, the weight below (for she stows all her freight in the hold) must necessarily keep her steady in a hurricane. We mention these facts as a sheer act of justice to Captain Walker, than whom a more enterprising steam boat proprietor does not exist. As he has done right by us, there is no reason why we should not do well by him. . . . Captain Walker the enterprising proprietor has never had justice done him by the public. Within 7 years he has built 6 steam boats, among which were the *Columbus*, the *United States* and the ill-fated *George Washington*.'

At first, approval of the combination appeared to be widespread but a somewhat disturbing tone was sounded by the *Daily Chicago American* for

⁴⁶ As reckoned in 1839, but actually about 959 miles including stops at the principal ports. The average speed of *General Wayne* was 13 miles per hour, of *Illinois*, if the same course was followed, was 16 miles per hour.

⁴⁷ *Daily Chicago American*, 22 June 1839.

⁴⁸ *Ibid.*, 30 May 1839.

⁴⁹ 176 miles. Average speed, 12.5 miles per hour.

⁵⁰ 261 miles. Average speed, 13.7 miles per hour.

⁵¹ 139 miles. Average speed, 11.5 miles per hour.

⁵² *History of the Great Lakes*, op. cit., I, 632-633.

14 August when it reported the first opposition as: 'SPUNK!—The little steamboat *Cincinnati*⁵³ has started an opposition to the mammoth steam-boat monopoly of the lakes. She goes upon the motto of "free trade and sailors rights."'

The Illinois State Legislature had not responded favorably to the suggestion of the editor of that enterprising journal, that it sponsor the presentation of a set of colors to *Illinois*, the favorite steamer of the state. Nevertheless he had his way. A committee of public-spirited citizens had raised the necessary funds. On 23 July, they were presented to *Illinois*, by William B. Ogden, Esq.,⁵⁴ who made a brilliant speech filled with 'thick crowding fancies,' which glorified the state, the steamer, and Chicago, her owner Oliver Newberry of Detroit, and Captain Chesley Blake, her master. Walter Newberry, Esq., of Chicago replied in behalf of his brother her owner. Captain Blake received the colors and made a spirited and sensible reply. Present were General Winfield Scott and a large crowd of citizens of the city, especially the fairer portion whose smiles and beauty shed luster upon the occasion. Said the *American*: 'Chicago has saved the honor of the State, which had not the magnanimity to pay this little tribute to her beautiful namesake.' After the ceremony, *Illinois* left on an excursion, running up to Gross Point,⁵⁵ thence down to Calumet⁵⁶ and from there back to Chicago. Notwithstanding a heavy shower was falling nearly the whole time, the party is said to have been very pleasant.⁵⁷ This was a fine boost for *Illinois*, but did not daunt the partisans of *Great Western*. The *Daily Chicago American* for 27 July called attention to her fine qualities and on 2 August announced that 'Captain Walker intends giving a sailing party on the return of the *Great Western*. Let the beaux put their hair in papers and the ladies get ready their rouge—It will be a grand affair.' Describing this affair which took place as scheduled, the *American* for the fourteenth went off the deep end:

Capt. Walker, the enterprising and gentlemanly master of the *Great Western*, yesterday gave to the citizens of Chicago an excursion on board his magnificent boat. She left the wharf of Hubbard & Co., at 3 P.M., taking with her the 'beauty and chivalry, the fair women and brave men' of our city.

As the gallant steamer moved majestically into the blue waters of Lake Michigan, of which she is the proudest ornament—'the deck was cleared for action,' and

'Music with its voluptuous swell,

⁵³ 116 tons.

⁵⁴ First Mayor of Chicago, and one of its strongest boosters and its first millionaire.

⁵⁵ Now in Evanston, Illinois.

⁵⁶ Now port of Chicago.

⁵⁷ *Daily Chicago American*, 8 and 10 May, 17 and 24 July 1839.

Soft eyes looked love to eyes which spoke again,
Aud all went merry as a marriage bell.'

As the music rang out its gay and merry sounds, the dance was formed. The lake breeze freshened, and fanned the blushing cheek of beauty, and sported with fair ringlets of fair ladies as they tripped it merrily, and all was buoyant and happy. We observed among our native, prairie, Illinois flowers, some importations from across the blue waters, which we hope to see blooming in our prairie soil. We are confident that our bachelors will not long permit

'Their beauty to blush unseen
Nor waste its sweetness on the desert air'

If we could judge from the attentions of our gentlemen, the fair strangers met with the reception which beauty merits. Success to them. . . .

The excursionists held a meeting in the cabin thanking Captain Walker and expressing their admiration and respect for him and his fine steamer.

Cruises to the upper lakes were becoming the fashion of the day. The *Buffalo Advertiser and Journal* for 29 July, reporting: 'The splendid boat *Erie* left this morning for a fifteen day's excursion to the Upper Lakes. There was a goodly number of passengers, and many more are expected at Erie and Cleveland. A trip over the crystal waters of St. Clair, Huron and Michigan, at this season of the year, accompanied by an excellent band of music must be delightful. They are fortunate who could avail themselves of the opportunity. As for the corps scissorial, they must still: Tug at the Oar!' Seven days later the *Daily Chicago American* reported, 'the beautiful steamer *Erie* arrived at our harbor this morning on a pleasure excursion to the Upper Lakes. She came in to the sound of music with a goodly company of passengers. Many strangers are now in the city awaiting the departure of boats for the east.'

A Reverend Dr. Humphrey who made the fashionable tour of the lakes described the waters of lakes Michigan and Huron:⁵⁸ 'as most beautiful—crystal, yet showing you the bottom at a great depth; and yet, the whole surface as far as the eye can reach, presents the most exquisite tints of the emerald, sparkling and leaping in the glad sunshine. You sit upon the guards, hour after hour, and look and admire the light and shading, which no pencil can imitate. The pebbles and small stones on the shores of these lakes are worn almost as smooth and regular as the tool of the lapidary could polish them—and as they are of various colors, shapes and sizes, the bottom near the shore is a sort of natural mosaic, which is altogether inimitable. The waves as they ripple, and the little fish, as they glide over

⁵⁸ *Ibid.*, 23 August 1839.

this splendid variegated pavement, seem to move in a sort of rejoicing consciousness of being privileged above all the other fish and waters in the world.'

The local journals constantly called attention to the necessity for more harbor improvements and the installation of other aids to navigation. The lakes were far away from Washington and the importance of this growing commerce was given scant attention there. Their navigation was not altogether similar to that of salt water. On them there was not enough sea room for vessels to run before the heavy spring and fall storms and there were but few places to run into for safety, particularly on the upper lakes. The papers blamed the Federal government for the lack of such improvement and for the heavy losses in lives and vessels that occurred at those times. Senator Henry Clay was one of those who had doubts of the propriety of such appropriations. He was cornered at Buffalo after a voyage on Lake Erie. There he inspected several steamboats, and was given a big dinner and reception at the American House, at which he retracted his opinion, saying:⁵⁹ 'I have been very glad, during my voyage upon this lake, to find that an erroneous impression existed in my mind as to the improvement of harbors. I had feared that the expenditure of public money had often been wasteful and unnecessary upon works on the lake shore. There are probably a few instances in which it might have been properly avoided; but I am now fully persuaded that in general, the expenditure has been necessary, wise and salutary.' Nevertheless it was some years before improvements were made that were adequate for the commerce and the steadily increasing size of the steamboats and the other craft engaged in it.

The Thames steamer *Cynthia* was rebuilt after the fire of the previous October which destroyed her upper works. Renamed *Western*, she was back in service in June, under Captain Thomas McCrae. The *Western Herald*, the local journal, hoped she would be supported by Chatham people and elsewhere and drive out the Yankee boats in Canadian waters. General Brady had been hired by two gentlemen of Chatham for the same service. Loyalist partisans threatened to burn her in revenge for the burning of *Thames* in the Battle of Windsor on 4 December 1838.⁶⁰ But the *Western Herald* asked the inhabitants to bear the sight of the Yankee flag, and reminded them that the well-being of Chatham depended upon the steamboats.⁶¹

⁵⁹ *Ibid.*, 1 August 1839.

⁶⁰ H. A. Musham, 'Early Great Lakes Steamboats, The Battle of the Windmill and Afterward, 1838-1842,' *AMERICAN NEPTUNE*, VIII, No. 1 (January 1948), 11.

⁶¹ Fred Coyne Hamil, *op. cit.*

Business was looking up along the Thames. Another steamer, *Brothers*, 150 tons, was built by William and Walter Eberts at Chatham this year and made her first appearance on the Detroit River in August. She ran three times a week from Chatham to Amherstburg, with Walter Eberts as master. She was advertised as having large comfortable cabins for ladies and gentlemen and a saloon well filled with choicest wines. She was described in the press as an excellent specimen of Canadian marine architecture, though the engine was reported as insufficient for her build and size. On her, one A. S. Holmes dashed off the following effusion:

Don't you see the dashing foam,
The spray of one returning home,
So long before the others!
How swiftly, she the waters walk,
How crowded are the Chatham docks!
To welcome home the Brothers!

Ye little craft, to your heels take,
Before you founder in her wake—
She rapidly is nearing!
See how the waters do divide,
And stand like mountains by her side,
For life be disappearing!

Be this as it may have been, a traveling Englishman had a different opinion. Said he: 'never in my life have I suffered more severely from the jolting, tossing, rolling, and heaving save in a springless wagon on a corduroy road. Every nail in the boat seemed to quake in the straining timbers, during the six hours thus wretchedly spent crossing Lake St. Clair.' Nevertheless the *Western Herald*, not liking this drastic criticism, defended both captain and boat and said everybody was satisfied.⁶²

Crime came to the high lakes in the latter part of July. On 6 August, the *Daily Chicago American* carried the story: 'INFAMOUS—Capt. Gilman Appleby⁶³ of the steamboat *Constitution*, has been arrested in Buffalo, and committed to prison, for violating an unfortunate young girl, aged fifteen, who was on her way from Detroit to Ontario County.'⁶⁴ The Buffalo Advertiser of the 29th Ult, contains the following additional statement; "It appears that the girl's parents had placed her under the protection of a friend, who was on his way east, and that, under pretext of furnishing her better accommodations than those which the boat offered to steerage, Appleby took her to his room on the upper deck and locked her in." The details from this period, are of such a revolting character that we withhold their publicity.'

Trouble struck *Great Western* on the evening of Sunday, 8 September, as she lay at her dock in Detroit just before leaving for Buffalo. While crossing Lake St. Clair, on returning from a trip to Chicago, a fire started

⁶² *Ibid.*, pp. 52-54.

⁶³ Of *Caroline* fame. H. A. Musham, 'Early Great Lakes Steamboats, The Caroline Affair,' *AMERICAN NEPTUNE*, VII, No. 4 (October 1947), 302-304.

⁶⁴ Ontario County, New York.

in the fire room under the boilers. It was soon brought under control, but not entirely so. After the boat docked at Detroit, the smothered fire burst forth again and in an instant the whole vessel was one entire sheet of flame. There were 30 cords of wood in the hold, all of which were on fire. The Detroit fire companies quickly responded to the alarm and worked until midnight before the flames were extinguished. The whole superstructure and the entire hull were seriously damaged, but the engine was still in good condition. Most of the passengers lost their luggage. One gentleman from New Orleans was much burned trying to save his valise which contained \$12,000. The barkeeper who was on shore also lost a considerable sum.

The loss was estimated at \$40,000, only \$5,000 of which was covered by insurance. Commented the *Detroit Advertiser* on this disaster: 'Captain Walker meets with heavier misfortunes, and meets them better than any man we know of. When we last saw him yesterday, he was busily superintending the clearing of the wreck, and we heard him express his purpose to proceed immediately to the reconstruction of the floating wonder in which he has taken so much and so just pride.'⁶⁵

Heavy storms swept the lakes on 12 September. The *Daily Chicago American* for the seventeenth reported: 'The *United States* came in last night and the *New England* and *Constellation* today. The *New England* left Buffalo a week ago last Friday—and we understand was three days getting over Saginaw Bay. The *United States* brought upwards of 100 hale Norwegians, men, women and children, with plenty of specie, bound for the Rock River country to buy and improve land. We bid them welcome. They are of the right sort.⁶⁶ . . . The boats have had a rough and long time of it. Several sail vessels also made our harbor today.'

Later information on *Great Western* reported that the hull was sound and that she had been towed from Detroit to Huron to refit.⁶⁷ News from Huron stated the 'Pride of Huron' was to be rebuilt and that Walker and others had said that \$20,000 to \$30,000 would fit her out as good as ever she was. Said the *Huron Advertiser*: 'She must—she will be rebuilt without delay.'⁶⁸

Business fell off towards the end of the summer and on 6 September nineteen steamboats, two ships, one barque and seven brigs were reported as being in Buffalo harbor. Half of the steamboats, belonging to the

⁶⁵ *Niles National Register*, LVII (14 Sept. 1839), 41-42.

⁶⁶ This was one of the first if not the first migration of Norwegians to this country.

⁶⁷ *Daily Chicago American*, 16 September 1839.

⁶⁸ *Ibid.*, 30 September 1839.

combination were awaiting to take their turns on the various routes and the other half undergoing some repairs. Among the sailing craft was the full-rigged ship, *Julia Palmer*, one of the very few on the lakes, being converted to a steamboat.⁶⁹

Regular service across Lake Erie from Cleveland to Port Stanley was reported from Cleveland. Said the *Daily Chicago American*, 'it will be a great convenience to immigrants and others.'

The wheels of justice turned slowly in the Appleby affair. He left Buffalo on 5 October on the steamboat *Sandusky*, for Ohio, in the custody of Sheriff McKnight and two assistants. Miss Westfalls was expected to have arrived at Buffalo the same morning on her way west, but did not reach town in time to accompany the party. There was no doubt of her intention to be present when the case was presented to the Grand Jury. Mrs. Appleby accompanied her husband and appeared to be plunged in deep affliction.⁷⁰

Newcomers to the Chicago run were *Cleveland* and *Chesapeake*, both probably taking the place of the removal of *Great Western* from service by her bad fire. *Chesapeake* was almost new and had been built under the watchful eye of Captain Howe, her master. She had a low-pressure engine of the most approved style and but one smoke pipe, a return to the model of the first boat. The *Daily Chicago American* commented on the sixteenth: 'she is not in the habit of coming to our port, or her good qualities would speak for themselves. We wish every new boat a profitable welcome to our harbor.'

The boats in the upper lakes trade continued to have full freight and many passengers, up into the fall. Eastward business was also good. Now that first-class steamers were giving frequent, regular service to Buffalo, Chicago was becoming the port for the trade of the upper Mississippi valley. In several issues, the *Daily Chicago American* pointed out the advantages of travel to the east by boat to Peru, the head of navigation on the Illinois River, the stages to Chicago and the palatial boats on the lakes. Eastward travel via Chicago increased in popularity and was much greater than it had ever been.⁷¹ Travel west was good, the wharves at Buffalo were again crowded with immigrants, with 1,000 more of them reported on their way up from Albany with many more to follow.⁷²

All told, the season was a fine one for the steamers in the Chicago trade.

⁶⁹ *Ibid.*, 6 September 1839.

⁷⁰ *Buffalo Advertiser*, 5 October 1839.

⁷¹ *Missouri Republican*, *Daily Chicago American*, 4 and 6 September 1839.

⁷² *Daily Chicago American*, 23 September 1839.

The imports there for the year totaled to a value of \$630,980.26, while the exports amounted to but \$33,843.00, the new country not yet producing enough of surplus produce to be moved east.⁷³

The fall brought the usual heavy storms and a number of accidents. *DeWitt Clinton* anchored in Milwaukee Bay on 11 October, while on her way to Lake Erie. Captain Squier went ashore with the mate and clerk on ship's business. A strong northeast wind was blowing and a heavy sea running. They attempted to return to the steamer that evening with five others, in a yawl, described as most excellent, but not belonging to it. It was filled by the surf and overturned as it entered the lake from the river. Two aboard swam ashore, the captain and one other held on until rescued from the shore, almost senseless, but the other four including the mate and clerk were drowned.⁷⁴ A three-days' blow starting on the night of the seventeenth swept the upper lakes. *James Madison* on her way down, got as far as Milwaukee and lost its last anchor trying to ride out the storm and then returned to Chicago. The other had been lost at Skilogege,⁷⁵ on her last trip up. *New England* lost a wheel in this same storm while crossing Saginaw Bay. Bad weather later in the month added to the toll of trouble. *Vermillion*, a new boat this year, broke her engine on her way to Chicago when fifty miles south of the Manitous. St. Joseph was reached with the aid of her sails. From there she was towed to Chicago for repairs. *Illinois* broke her shaft on Lake Erie and was taken into Fairport by *Rochester*. From there she was towed to Detroit for repairs estimated by owner Newberry to cost from \$3,000 to \$4,000. On the twenty-eighth, the brig *Osceola*,⁷⁶ Billings master, on entering Buffalo harbor, ran her jib boom

⁷³ *Directory of the City of Chicago, Illinois for 1844* (Chicago: Ellis & Fergus, 1844), p. 77.

⁷⁴ *Daily Chicago American*, 17 October 1839.

⁷⁵ Isle-aux-Galets (Isle of the pebbles), of the French days, now Skilligalee.

⁷⁶ *Osceola* left Chicago early in October, and was carrying 3,768 bushels of wheat and 500 barrels of flour. The wheat was in bulk and had been shipped by Newberry and Dole, from their new warehouse on the north bank of the Chicago River at N. Rush Street. It was the first bulk grain cargo of any kind moved from Chicago. This warehouse or granary is incorrectly referred to as the first elevator. It was a two-story wooden structure of modest size. The grain was hoisted from farmers' wagons to the bins on the second floor by hand power, for storage. When it was shipped it was taken from them in buckets which were passed along a line of men to the chute down which it poured to a measuring box holding two bushels from which it was emptied into the hold. This granary had but one feature characteristic of the grain elevator, the loading spout. Such as it was, it was the first real depository for grain on the lakes and a boon to Chicago. The farmers of the country thereabout now had a place to store their grain for shipment or to hold it for better prices, and to Chicago they brought their surplus wheat and other grains. More storehouses were quickly built. Horsepower displaced man power, and later steam that of horses. The old hoist was replaced by an endless chain of scoops or grain elevator, from which these structures became known as elevators.

Mechanical equipment for handling grains was largely the inventions of Oliver Evans of Philadelphia or his adaptation of old devices. Evans was the inventor and builder of the Oructor Amphibolos (Ambitious Digger), the prototype of the water buffalo of World War II. (Greville and Dorothy Bathe, *Oliver Evans*, Historical Society of Pennsylvania [Philadelphia, 1915], pp. 11-19, 189-191.) Grain had been shipped from Lake Michigan since the fur-trading days but in very small amounts. The first cargo of size, about 2,000 bushels possibly in sacks, was shipped from St. Joseph in

into *James Madison*. It pierced three staterooms on the starboard side and carried away several stanchions.⁷⁷

Other steamers built this year and not referred to were: *Chautauque*, 200 tons, built at Buffalo; *General Harrison*, 363 tons, built at Maumee City; *General Scott*, 240 tons, built at Huron; *Huron*, 140 tons, built at Newport; *Harrison*, 63 tons, built at Erie; *Express*, 150 tons, built at Pultneyville; *Gildersleeve*, 250 tons, Canadian, built at Kingston.⁷⁸

There were four losses of steamboats this year. In April *Oliver Newberry* ran on a rock in Maumee Bay and sank. *Cataraqui* was destroyed in the big fire in Kingston harbor on the seventeenth of the month.⁷⁹ *Erie*, Captain Titus, on her way up the Detroit River, was struck by the Canadian steamer, *Goderich* downbound, when nearing the head of Fighting Island. Captain Titus stopped his engine to avoid collision, but *Goderich*, bound for the same landing, came on and in two minutes time struck *Erie*'s bow, recoiled from the shock and commenced to sink. Captain Titus lowered and manned his boat and took off her passengers and crew. *Goderich* went down in fifteen minutes in five fathoms of water. *Erie* was but little damaged.⁸⁰ In November *Brothers* burned at Chatham. Other incidents were the grounding of *Cincinnati* near the mouth of Sandusky Bay, the ramming of *Daniel Webster* as she lay at anchor on the Detroit River three miles above Malden, by *Erie* in which she alone was damaged, and the collision of *Great Britain* and *United States* on leaving Rochester harbor.⁸¹

Generally speaking, 1839 was not too bad a year for the lakes, especially for the Chicago trade. But as the season waned, the improvement in business conditions faded away and a deep depression set in which lasted for four years.

REFERENCES

Augusta Grant Gilkison, 'Early Ship Building at Niagara' (Niagara Historical Society, No. 18).
 A. T. Andreas, *History of Chicago, from the earliest period to the present time* (Chicago, 1884). I.
 Elizabeth Therese Baird, 'Reminiscences of Life in Territorial Wisconsin' (*Wisconsin Historical Collections*, XV, 251).

the brig *John Kinzie*, R. C. Bristol, Master. One or two cargoes were taken by the schooner *St. Joseph* from the same port in 1835, and one of 1,500 bushels from Michigan City in the schooner *Post Boy* in 1836, as well as small amounts in the steamboats that called at Chicago. (*Daily Democrat*, Chicago, 8 May 1849.) *Osceola*, however, as far as is definitely known, initiated cargo carriage in bulk on the lakes.

⁷⁷ *Daily Chicago American*, 6 November 1839.

⁷⁸ *Daily Democrat*, Chicago, 8 May 1849.

⁷⁹ H. A. Musham, 'Early Great Lakes Steamboats, The Battle of the Windmill and Afterward, 1838-1842,' *AMERICAN NEPTUNE*, VIII, No. 1 (January 1948), 51.

⁸⁰ *Daily Chicago American*, 15 June 1839.

⁸¹ H. A. Musham, 'Early Great Lakes Steamboats, The Battle of the Windmill and Afterward, 1838-1842,' *AMERICAN NEPTUNE*, VIII, No. 1, p. 50.

House of Representatives, 25th Congress, 3d Session, Document No. 21, December 13, 1838.

The Public Statutes at Large of the United States of America from organization of the government in 1789 to March 3, 1875, edited by Richard Peters, Esq. (Boston: Little, Brown and Company, 1860), V.

J. Ross Robertson, *Robertson's Landmarks of Toronto, A Collection of Historical Sketches of the old Town of York from 1792 until 1833, and of Toronto from 1834-1895* (Toronto, 1895), II.

J. H. Kennedy, 'Early Marine Interests of Cleveland,' *Magazine of Western History*, II (1885).

Fred Landon, *Western Ontario and the American Frontier* (New Haven, 1931).

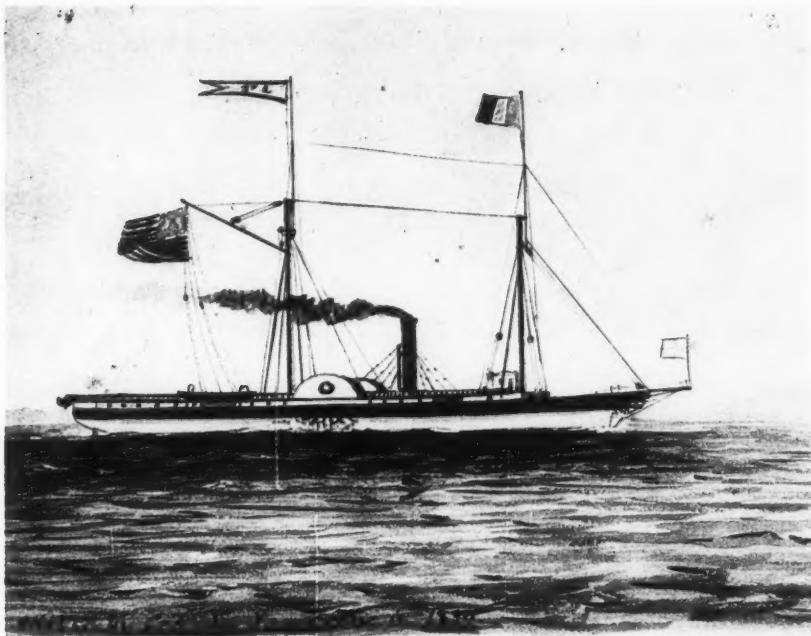
Samuel W. Durant and Henry B. Pierce, *History of St. Lawrence Co. New York* (Philadelphia, 1878); *History of the Great Lakes, Illustrated* (Chicago: J. H. Beers, 1899), I.

James Van Cleve, 'Reminiscences of Early Sailing Vessels and Steamboats on Lake Ontario,' manuscript in Chicago Historical Society.

Directory of the City of Chicago for 1844 (Chicago: Ellis & Fergus, 1844).

Fred Coyne Hamil, 'Early Shipping and Land Transportation on the Lower Thames,' *Papers and Records*, Ontario Historical Society, XXXIV (1942).

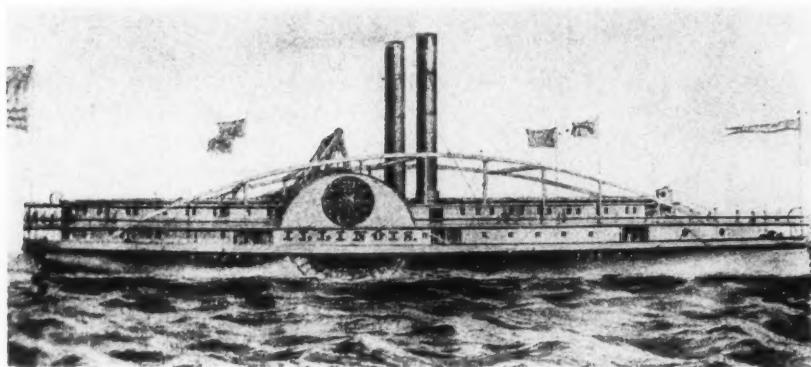
H. A. Musham is a naval architect living in Chicago. He is writing a maritime history of the Great Lakes and this article and others forthcoming are the results of some of his researches over a good many years.



Steamboat *St. Lawrence*, sketched by Captain James Van Cleve in 1839

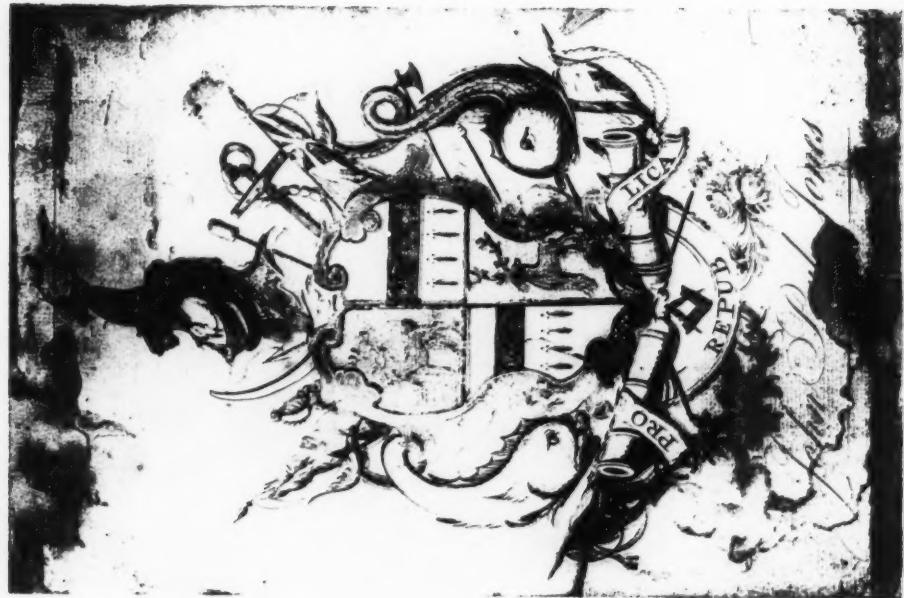
She had a white hull with green bulwarks and a black stripe along the sheer line; black rail, white deckhouses, and a green upper deck rail. The boats had red sides and brown bottoms. Tops of the wheelboxes were striped in orange with red paddle wheels. The smoke pipe was black with a red top and a gilded scroll decorated the stem.

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Steamboat *Illinois*, built expressly for the Buffalo-Chicago service. This shows her after the addition of the upper deck cabin in the early forties

Courtesy of the Wisconsin State Historical Society, Madison, Wisconsin



(Left): Seal on letter of John Paul Jones to
Hector Mc Neil, 23 February 1778
Courtesy Naval Academy Museum



(Right): Painted Achievement of Arms
Courtesy Masonic Library, Boston

The Arms and Seals of John Paul Jones

BY SAMUEL ELIOT MORISON

HERALDRY is the handmaid to history.' This old saw, which I heard in my youth from an heraldically minded uncle, would seem to have slight applicability to naval history. But when a naval hero such as John Paul Jones goes in for heraldic seals and coats of arms, an examination of the design may throw some light on his taste and character.

Of Commodore Jones we have a painted 'Achievement of Arms' and three heraldic seals. The fact that he went in for this sort of thing is interesting in itself. John Paul, son of a Scots gardener, brother of the town tailor of Fredericksburg, Virginia, and former master mariner in the English Merchant Navy, added Jones to his name for reasons never satisfactorily explained, shortly before he received his first commission in the Continental Navy on 7 December 1775. He was, by no stretch of the imagination, 'armigerous'—a gentleman with an hereditary right to a coat of arms. But, that he longed to establish himself as one, these designs are sufficient proof. It is known that in 1774 or 1775 he wooed Dorothea Dandridge of Hanover County, Virginia, who later became the second wife of Patrick Henry; and that in the autumn of 1777, when Burgoyne's surrender suggested that the war might soon be over, he tried to buy an estate on the Mattaponi River in Virginia. These arms and the first seal are probably connected with his desire to set himself up as a Virginia planter and win a bride from the F.F.V.

Seal no. 1 and the painted Achievement of Arms may be considered together because their similarity suggests that one was copied from the other, or that the same man made both.

The earliest known impression of Seal no. 1 is on a letter from John Paul Jones to John Wendell of Portsmouth, New Hampshire, dated from Nantes, 11 December 1777.¹ There is, however, a much better im-

¹ This impression is reproduced in *Massachusetts Historical Society Proceedings*, XLIX (1916), 278. Letter and seal belong to Major William G. Wendell, U.S.M.C.R., a descendant of the recipient.

pression of it in a letter from Jones to Captain Hector McNeill, U.S.N., now in the Naval Academy Museum, dated 23 February 1778.

The arms on this seal are correctly described by Bolton² as follows:

'Quarters 1 and 4: Gules a stag statant; quarters 2 and 3: erminois on a fess azure, 3 crosses crosslet argent. Crest: a stag's head erased.'

Translated into ordinary English, this means, a standing stag on a red ground, and three silver double-crossed crosses on a blue bar against a background of ermine fur. Crest, a stag's head with rough edges on the neck.

The motto is PRO REPUBLICA. Two cannon and the Masonic square and compasses are between the motto and the shield, dolphin 'supporters' on each side of it, and above it a lance, sword hilt, cutlass, and part of an anchor.

The question now arises, where did Jones get these arms?

Sir Bernard Burke's *General Armory* (1884), pp. 546-549, lists the arms of numerous Jones families of Wales and England as a stag. The buck is sometimes 'statant' like the one on John Paul Jones's shield, sometimes 'passant' and sometimes 'trippant,' but he always has gold antlers. The same work, p. 780, lists arms of several Paul families of Gloucestershire, England, which are almost exactly the same as quarters 2 and 3 on the Jones seal.

Whoever cut John Paul Jones's seal must have had access to an armorial or book of coats of arms depicting those of the Welsh Joneses and the Gloucestershire Pauls, and combined them as a new coat for his client.

The Achievement of Arms here illustrated is painted in water color on paper and in a contemporary frame. It descended from Commodore Jones to his great-grandniece Madame Gombault (née Lowden of Charleston, South Carolina) who sold it to Charles T. Gallagher of Boston in 1905. Mr. Gallagher left it to the Masonic Library in the Masonic Temple of Boston, where it still is.³

The arms, crest and motto are the same as in Seal no. 1, except that in the two Paul quarters there are no cross crosslets on the fess. The stag's head crest sits on a helmet, and the stag in the Jones quarter is gilded. The supporters are the same funny dolphins as on the seal. The 'mantling' of the shield is highly elaborate, including two cannon, a sword hilt, a cutlass blade, a lance or arrow, a cannoneer's sponge and worm,

² Charles K. Bolton, *Bolton's American Armorial* (Boston, 1927), p. 93.

³ It is described by Gallagher, most inaccurately, in Masonic Grand Lodge of Massachusetts *Proceedings* for 1912, p. 104.

a foul anchor, a boarding axe, and the Masonic square and compasses. Below the motto are two branches of roses.

The most interesting features of the mantling are the four flags, as follows:

1. Above, dexter, the Grand Union flag of 1775-1777, but with red, white and blue stripes.
2. Above, sinister, the British red ensign.
3. Below, dexter, what appears a plain blue flag or Commodore's pendant.
4. Below, sinister, a flag with thirteen red, white and blue stripes, but a pine tree in the canton.

These are the arms that Mrs. DeKoven used as a cover design for her *Life and Letters of John Paul Jones*. There is a framed copy of them in the Jones room at the Portsmouth Historical Society, but the flags are not correctly copied.

Since the Stars and Stripes are not here, it seems certain that these arms were painted before June 1777 when Congress adopted the Stars and Stripes as the flag of the United States. The fact that all three flags have red, white and blue stripes adds color to the evidence produced by Hugh F. Rankin,⁴ to the effect that the standard United States Naval flag of the War of Independence was thirteen white stars on blue field and thirteen stripes, alternately red, white and blue. We know, of course, that Jones as senior lieutenant Continental Navy first raised the Grand Union flag in U.S.S. *Alfred* on 3 December 1775, but it has always been assumed that the stripes of that flag were red and white.

It seems strange that Jones should have incorporated the British ensign in his arms, but he had sailed under that honorable banner for many years before the war. Why, however, should he have added the pine-tree flag, the ensign of General Washington's Navy during the Siege of Boston, and of the Massachusetts State Navy? At the risk of starting a new Jones myth, I suggest that during the period in 1774-1775 when we have no knowledge of what he was doing, he may have served in the Army's Navy under his real name John Paul. Our first evidence of his having taken the name of Jones is Dr. John K. Read's letter to him of 13 October 1775, addressed to 'Mr. John Jones, to the Care of Mr. David Sproat, merch[ant], Philadelphia.'⁵

⁴ 'The Naval Flag of the Revolution,' *William and Mary Quarterly*, 3d ser., XI (1954), 339-353.

⁵ This is the first letter in the Jones MSS. Library of Congress. In my opinion, however, the pine-tree flag is due simply to the designer's fancy. Everyone at the time of the Revolution was careless

This Achievement of Arms and the Seal must have been made in the United States. For there is an impression of the seal on a letter written by Jones from Nantes on 11 December 1777, after he had been in France only a week, which was not enough time to have a seal cut. As to who the artist or artists were I have not the slightest idea. The only American cities where Jones spent any length of time before sailing for France in U.S.S. *Ranger* on 1 November 1777 were Philadelphia, Boston, and Portsmouth, New Hampshire. In the first two, at least, there were several engravers who could have cut the seal, and sign and carriage painters who could have executed the arms.

Seal no. 2 is known to me by only one impression, on a letter that Commodore Jones wrote from the Texel on 22 October 1779, to Baron van der Capellen, but did not send.⁶ The style is so French that we may assume that Jones had it cut in Paris between his first visit there in December 1777 and the sailing of *Bonhomme Richard* in August 1779. The oval shield, and the youthful Neptune with trident who supports it, symbolizing the infant American Navy, rest on waves. The arms are exactly the same as on Seal no. 1—Jones quartered with Paul. The design of the flags on the dexter side cannot be made out. Over the flags is some sort of foliage, probably bay leaves. This seal photographs so badly that we do not attempt to reproduce it.

In 1780, after Commodore Jones had been made Chevalier de l'Ordre de Mérite Militaire by Louis XVI, he evidently felt that a new seal was in order. And so we have Seal no. 3, which is on the envelope of a letter from Jones to the firm of Neufville & fils, Amsterdam, introducing Captain John Barry U.S.N., dated at Philadelphia 4 June 1783. It is now in the New-York Historical Society's collection, with other Jones items that were formerly the property of the Naval History Society of New York.

Seal no. 3 is similar to no. 2. Although the impression is not good, we can see just enough of the arms to be sure they are the same as in Seal no. 1. Under the shield, the Masonic square and compasses have been replaced by the Cross of the Ordre de Mérite Militaire, hanging on a ribbon. In place of the Jones stag as crest, we now have a coronet, to indicate Jones's rank of chevalier, surmounted somewhat incongruously by a screaming eagle. There are flags on the dexter side, one cannon, and the motto *PRO REPUBLICA*.

Anyone may draw his own conclusions. To me, these arms and seals

in depicting flags, and if we try to draw conclusions about the American flag from contemporary pictures, such as the English portrait of Commodore Hopkins and the well-known engravings of the fight between *Bonhomme Richard* and *Serapis*, we get hopelessly confused.

⁶ Jones MSS. Library of Congress, VI, 7380-a.

are a touching evidence of the desire of this self-made sailor to assume his proper place among our early republican aristocracy.⁷

⁷ In this connection two phony John Paul Jones arms may be mentioned.

(1) A modern painting of arms (ermineo three lions rampant, crest, a unicorn) presented to the Library of Congress by a Washington lady as those of John Paul Jones. These were never used by him, but are the arms of a Jones family of Virginia and North Carolina.

(2) Arms on a coffee pot made by Paul Revere, said, in John Marshall Phillips, *American Silver* (New York, 1919), Plate 21 and p. 103, to be those of John Paul Jones. But they are not; they are two lions 'passant regardant' (running and looking at you), with a different motto and crest from those that John Paul Jones used. The 'story' attached to this, that the Earl of Selkirk ordered it made for Jones in gratitude for his having returned the family plate, and that Jones gave it to Commodore Esck Hopkins, U.S.N., whom he hated bitterly, is one of the wildest yarns about Jones that has come to this writer's knowledge. The arms, incidentally, have nothing in common with the arms of the Earl of Selkirk.

Samuel Eliot Morison, President of THE AMERICAN NEPTUNE, INC., is America's most distinguished maritime historian. He is so well known that any notes here would be superfluous.



The Log of James Sutherland

BY FRANK MacSHANE

IN 1849, when James Sutherland crossed the Atlantic for the first time, he kept a journal of his experiences which gives a vivid picture of life aboard a sailing ship at a time when the New York-Liverpool packet service was at its peak. For thirty years the service had been growing, and a number of factors had created Liverpool and New York as the dominant seaports of England and America. With the repeal of the corn laws in 1846 and the institution of free trade, American cotton entered England via Liverpool for the industrial centers of the Midlands, and as Birmingham and Manchester in turn grew, so Liverpool became the chief export center for English manufactured goods.

New York, too, benefited from its fortunate geographic position and from American economic growth, and when, in 1825, the Erie Canal was opened, the produce of the American Middle West naturally became directed to New York rather than to Boston or Philadelphia. Finally, the potato famine of 1846 forced thousands of Irishmen to emigrate to America, thus increasing the traffic between the two great complementary ports of New York and Liverpool.

In the early years of the nineteenth century, travel between Britain and America was sporadic and uncertain. Few ships left punctually, passage was slow and there were no companies engaged in large-scale shipping. The foundation in 1818, however, of the Liverpool-Black Ball Line with four ships operating on a schedule, marked the beginning of the packet system. Thereafter growth was rapid, and Professor Albion's figures show that while there were only four ships in the Liverpool-New York run in 1820,¹ and none from London or Le Havre, by 1850 there were twenty-four ships operating between New York and Liverpool alone, sixteen between London and New York and another sixteen between Le Havre and New York, a total of fifty-six ocean packets, operated by twelve different lines. The size of the packets also increased: in 1820 the largest Black Baller measured 434 tons, whereas by 1850 the largest ship in service was 1,771 tons.

¹ R. G. Albion, *Square Riggers on Schedule* (Princeton, 1938).

Conditions of travel by mid-century, as James Sutherland's log indicates, were, generally speaking, quite decent for cabin class and wretched for steerage. Herman Melville, crossing in the same year, found himself in a stateroom 'as big almost as my own room at home,'² and the Irish actor, Tyrone Power, who crossed on the Black Baller, *Europe*, in 1833, describes the spaciousness of the cabin passengers' lounge with its inlaid wood paneling and the staterooms, each of which was 'furnished with a wash-hand stand, containing a double service, a chest of drawers, with handles of cut glass, a shelf or two for books, &c., and a brace of berths or bed places of ample dimensions, well appointed with mattress and linen.'³

In steerage, however, conditions were appalling, and many died from scurvy or fevers during the long voyage. Since no ship's doctor was provided, it was customary to appoint one of the passengers to the task, as Sutherland was selected, despite his almost total ignorance of medicine.

Sutherland himself was born in Edinburgh in 1827, and following some years at the University there, he came to America in 1849, eventually moving to Montreal where he became a prominent citizen and, until his death in 1870, contributed like many other Scotsmen to the development of the country.

This, then, is the journal of a young man who left Scotland to seek his fortune in the new world, and it provides a lively picture of the conditions of travel when the Liverpool-New York packet run was at its height.

LOG 1849

Left home early in June for the El Dorado California but thro the advice of many friends changed my mind and determined to proceed to New York. Knocked about Liverpool until 30 Aug't. Got safely on board Ship 'John Hancock' Capt. Snow.

Aug. 30 [30 August 1849]. Hauled out of Waterloo Dock, Liverpool, & set sail for New York. Bore up Channel for the North Tack. Day wet and drizzly. Cleared up toward evening.

Aug. 31 [31 August 1849]. Calm and fine day. Accident occurred on board through the companion ladder not being properly fixed. Nearly killed two children & severely lacerated woman's leg.

Sept. 1st [1 September 1849]. Fine sun shine day with light winds and heavy rolling. Small Passengers all sick toward evening. Took surgeon's berth at request of captain, heavy demands on medicine Chest. Doctor wanted everywhere. One male passenger ill with pleurisy. Blistered him on chest left side.

Sept. 2nd. Sunday [2 September 1849]. Heavy rolling sea. Good wind. Doctor &

² Eleanor Melville Metcalf, ed., *Journal of a Visit to London and the Continent by Herman Melville 1849-1850* (Cambridge, Massachusetts, 1948).

³ R. G. Albion, op. cit.

every soul sick. Only Governor and little Charlie well. Doctor not to be found.

Sept. 3rd [3 September 1849]. Ship spanking gallantly along on the North Atlantic. Rate 11 knots. Members of the passengers still sick, recovered from own sea sickness. Being now fully introduced to our cabin passengers, it may not be uninteresting to describe them. They consist of the following, Mr. Woods and daughter, Mr. and Mrs. Price and family of five. Mrs. Byrne, Mr. Wilson, Two Germans. Three German ladies with two children & self comprises the lot. Mr. Woods, on whom we bestowed the appellation of the Governor, was one of those jolly old country gentlemen that is generally to be found amongst a respectable party of pleasure, and if ever you have taken notice, you will find here was such a one as I wish to describe. He is generally looked upon as Father or Director of the Party, everything is generally submitted to him and his commands are strictly observed. He was the true picture of a country squire. At the gun or rod, Farming or Hunting, smoke a pipe or sing a song, there would be few could surpass him. Such was *our Governor*. His Daughter was a very amiable young lady, seemingly as fond of Domestic Affairs, as the Father was of outdoor sports, & invaluable to the old Gentleman for his home comforts.

Mr. Price, the Welsh, was the beau ideal of a 'John Bull' and quite altered my opinion of what I heard regarding the Welsh. He seemed to be a kind, affectionate, and almost too indulgent a Father, but sick of Church and State abuse in England, he had left home with his family for the Land of Liberty and Plenty to commence Farming and where he knew that his toils and labours would recompense him with abundance & happiness. His Lady, Mrs. Price, was one of those Dames of England highly accomplished and beautiful & in a word all that one could desire for a wife or mother and which along with her husband & Five as fine children as England can boast of will form rather a bit of an attraction when landed on the shores of Brother Jonathan.

Our next was Mrs. Byrne, a Lady from the Emerald Isles (Ireland) of an amiable disposition, kind and good nature, and one in whom we all found a most agreeable Cabin passenger, and which along with Mr. Wilson, a young Gentleman from England whom we yclept the 'Ladies Protector,' and myself, to whom they gave the high appellation of the 'Doctor,' formed one table and which, you may be sure, made as happy a Table Party as could be met with. The other table comprised the German party of seven which with their infernal messes at meals and continual chattering of German was rather a bit of annoyance to our Governor.

The Fore or Steerage part of the Ship was almost indescribable, but like the generality of Emigrant Vessels bound for America, were chiefly composed of Irish, and principally the lower class, & such a filthy and disgusting lot one would never wish to meet again. There was only a sprinkling of the better class of Irish with a few rather respectable English and Scotch of the Working Class & who were constantly making complaints against their filthy neighbours whom they had unfortunately got mixed with.

The Crew composed of men of all Nations whom along with the Captain and his Lady were all that could be desired. Completed our Floating Garrison.

In describing the above I have ommitted the *Most Important Personage*, our Steward, and to do him justice one would require to write a whole volume in order to describe him fully, but as my Journal will not admit of this, I will only give a brief

outline of him. Imagine to yourself an ordinary sized man about 5 ft. 9 ins. in height with a Foreign appearance about the visage, dark uneven eyebrows, dark whiskers surrounding his face, ear to ear, worn rather short with a slight black patch of hair under the lip, & an imperial, & generally well greased short wig upon which was placed a sort of Turkish Smoking Cap. His dress composed of a purple coloured overshirt or blouse with sleeves turned up to the elbows [revealing] His handsomely tatooed arms executed by some eminent sailor artist, during a leisure hour, & which show off in all its richness of red and blue & intended to resemble Christ on the Cross with the initials of himself and his sweetheart. His trousers of Orleans Jean with Virginia Slippers completed the man. In strutting along the Deck from the Cabin to the Galley his carriage was *most erect* and I daresay in appearance to the steerage passengers, as he marched along, seemed to be some Foreign Noble reduced in circumstances or only filling the situation out of amusement. Indeed I have heard him say that he had had the command of some expedition against the Mexicans, been a great hunter in his youth and performed prodigies of valour, but how he came to fill his present office, I never could learn. In cooking he was par excellence only (to use his own expression) in his own estimation 'That damn'd boy of a Cook' has overdone this or underdone the other, meaning he had prepared the article well enough but the Galley Cook had spoiled it. From morning to night he was continually on [duty] and in order to get a favour from him you required first to praise the man then sweeten him with grog.

Sept. 4 [4 September 1849]. Calm sea, no wind. Row with Steward regarding meal hours. New arrangements. The Passengers are beginning to pop out of their nests. Many sick yet. Medicine and Brandy in great request. Dressed woman. Leg looks well. Find to be Ship Surgeon rather an awkward berth especially when you don't understand it. The Governor feels rather queer, afraid he will be sick. Dined at 3 Precise. According to our array best Dinner we have sat down to yet. The Governor highly complimented the Steward for his cooking—only feels a little chagrined at there being no potatoes on table. Determined to make amends by having some roasted for supper. Passengers all livened up after tea to dance. Where's Paddy? There on the Barrel Trimming his pipes for the dance. All thoughts of seasickness now vanished & the boys are looking for partners. At 9 p.m. visited patients. After supper had a few songs with our Governor, who is quite Merry. Thoughts of creating a theatre on board, but evaporates with the Steam of the Toddy and vanishes in the Smoke of our Cigars.

Sept. 5 [5 September 1849]. Ship lugging lazily along. After breakfast visited sick, of which there are always plenty in an emigrant Ship, whether the weather be fair or foul. Found many complaints against the lower class of Irish Passengers owing to their filthy and lazy habits. Had to send Ship's Mate to ropes end them out of their berths.

4 p.m. Strolled quarter deck admiring the Beauties of a Calm Atlantic Sea with brilliant sunshine. Ship making no head way. Passengers amused with Four Gram-pusses to windward, sure sign of wind. Ship rolling heavily from side to side, anticipates a breeze.

Sept. 6 [6 September 1849]. Wind again lulled after a very slight breeze. Nothing remarkable occurred, except a good many complaining of sickness through the rolling of the ship.

Sept. 7 [7 September 1849]. Ration day for steerage Passengers. After visiting sick, assisted Gov. in serving out provisions to steerage Passengers. The Gov. very Cross at them not answering to their names when called. In Cabin, Ladies are very busy making Ship's signals on the quarter deck. Three vessels seen, endeavoured to signalize one but too far off. At 10 P.M. Doctor and Captain summoned to visit one of the female Passengers thought dying. Found her very weak thro a severe attack of dysentery. Orders her some wine negus and opii. At sight of wine negus all the passengers fell suddenly ill but recover as soon again when I propose a dose of Physic to each.

Sept. 8 [8 September 1849]. Head wind. Ship going rather easy. Visited sick found all doing well. Killed one sheep and expect a jolly blow out of Fresh meat dinner. Good many Dolphins & large fish seen hovering around the Ship. I suppose anticipating share. After dinner which was excellent and included some fine apple tarts baked by Miss Price and Miss Wood for dessert, the Doctor considers it advisable to Administer a round of Brandy punch. The Gov. feeling the exhilarating benefits of the same proposes another which is strongly seconded by farmer Price. 9 P.M. blowing rather fresh. This being Saturday night at sea we all join in drinking sweethearts & wives and reviving our recollections of home, which recollections generally bring another round of Punch to dissipate our feelings.

Sept. 9. Sunday [9 September 1849]. Blowing fresh. Ship running ten knots West by North West. Occasionally shipping seas. Laughable to see the mischief it does amongst those who are forced from seasickness to come on deck. Good many of the Cabin Pas'rs sick consequently few at breakfast. Ship pitching strong. 2 P.M. Brig hove in sight Homeward bound, showed no signal. Day being dull and sea heavy I turned soon in.

Sept. 10 [10 September 1849]. Wind fresh but much lulled since yesterday. Passengers again appearing on Deck but looking all rather blue from the effects of yesterday's sickness. Governor and Staff sends invitation to Captain and Lady to dine with us tomorrow which is politely accepted, orders given to Steward to prepare Dinner on grand and extensive scale. The Ladies being now all out and well, set about the pastry department while the Farmer and Gov. are off to croak the fowls, of which they were not sparing. The Doctor and Mr. Wilson go below to visit sick, gives orders to have all up on Deck and fumigate the vessel. Appearance of ship fever.

Sept. 11 [11 September 1849]. Calm and fine. Lat. 31 x 10. Spoke the Ann McKenzie 36 days out from Quebec bound to Stockton, lost their Capt. in a gale. 3 P.M. Entertained our Capt. & Lady to Dinner. Roast Mutton, Ham, Boiled Beef, Fowls and Tarts innumerable with plenty of Claret, Sherry, and Brandy. After tea had dancing and singing on deck which wound up the day. Toward evening ship began to roll heavily, wind right astern very light with cross swell. Made it almost impossible to sleep in Berths as it kept us rolling from side to side.

Sept. 12 [12 September 1849]. Wind and sea as last night. Ship rolling heavily altho running 7 knots. Had to take Hand over Hand breakfast. Nothing occurred remarkable today except, as usual, a good many sick. This is caused by the poor living amongst the Steerage Passengers and closeness of lower set.

Sept. 13 [13 September 1849]. Wind lulled & sea moderate. Fine sunshine and shoal of porpoises driving to leeward.

Sept. 14 [14 September 1849]. Good breeze but lulled toward evening. Sighted three vessels. The wind having lulled set the ship rolling tremendously again, brought heavy swells pitching every loose article out of its place.

A few remarks on wind & Sailing. When the wind is blowing on the Starboard or Larboard quarter, if pretty fresh, the ship lays off on her lee side and runs smoothly and gallantly along. Should the wind veer round a point or two ahcad it then sets her pitching but which is not at all disagreeable if you should have got your sea-legs on, if not, your sickness is to be pitied. Should the wind lull, or be astern, the ship is sure to roll & terrifies the Female portion of the Passengers, but there is not the slightest danger to be apprehended if the cargo is well shipped, but should it not be so & shift, the devil & all is then to pay.

At 7 p.m. Called to visit a woman. Miscarried birth through fear with rolling of ship, another fainted, & terror pictured in nearly every female passenger's face. Calmed them down by assuring them that there was no danger.

Sept. 15 [15 September 1849]. Wind sprung up thro the night, good stiff breeze on. Ship running 10-1/2 knots S.W.W. Two ships to windward westward bound. Passed them toward evening. Ship laying well on and sailing smoothly. Once more Sat'dy. night at sea joined party in drinking Sweethearts & wives toward midnight. Gov. and Farmer Price getting rather jolly.

Sept. 16 [16 September 1849]. Sunday morn. Gov. and Farmer enquiring anxiously for the Doctor to get cooling draught. Farmer very sick thro last night's debauch. Wind lulled, day very fine being first good Sunday we have had. Passengers all turned up on deck. On banks of New Foundland at 6 p.m. Gov. turned seriously unwell. Cnolic was cramp in stomach. Administered the proper remedies toward 1/2 past 6. He felt much better this evening. I saw the first beautiful American sunset.

Sept. 17 [17 September 1849]. Morning calm & beautiful sunshine. Spoke the Dahlia Bound for Boston out from Glasgow 39 days. Our answer, New York out from Liverpool 18 days—which made the Dahlia capt. rather stale. Breeze sprung up toward mid-day from S.W. Ran completely away from Dahlia. 1/2 past 12 sighted Brig unknown but soon left her to keep company with the Dahlia. 2 p.m. Brig Homeward Bound signalized us but for want of signal Book could make nothing of it. Ran past each other with almost railway speed lat 44 x 26. Toward evening sea running high, set the Ship pitching & passengers sick.

Sept. 18 [18 September 1849]. Wind completely lulled. Ship laying to in dead calm. Wind E.N.E. 6 p.m., visited sick, ship rolling again with swell. Turned passengers up and got them dancing to Paddy's beautiful notes on the Flute, 12 midnight. All hands up to bout ship, this operation nearly frightening the lives out of those in bed with the noise the sailors made on Deck being our first tack about.

Sept. 19 [19 September 1849]. Stiff breeze from N.W. First time we have taken in Royals since leaving Liverpool although we have passed others with close reefed topsails. Sept. 19. 4 p.m. Blowing stiff and rather rough. Shipped two seas which nearly carried off Gov. Woods and his sheep but with the able assistance of the mate they succeeded in gaining shelter on the quarter deck. The strength of the sea, however, broke the stinsell boom and completely demolished the sheep pens.

There is no scene so grand at sea as to behold a ship dashing thro the waters in a gale of wind. Down she plows her head and dashes the foaming billows away on each side. Again she rears her noble prow out of the sea, gives her head a shake, then

down again to dash away the next succeeding wave, and sweep on her onward course.

I stood or rather held on by a rope on the quarter deck for hours admiring the scene. This overture to the Equinoctial gales, as the Gov. was pleased to term it, set those passengers who had not yet got their sea-legs on, again sick, half drowned a few, capsized one Medicine Chest & has done sundry other damages.

Sept. 20 [20 September 1849]. 'After a storm comes a calm,' & this morning beheld as beautiful sunshine as ever shone from heaven. With sea as calm as glass and numbers of Porpoises dancing their quadrilles in the water, the Passengers all turned up on deck & laughed at their yesterday evening's fright.

It is rather a strange sight on board of an Emigrant Ship on a calm day and is almost an indescribable scene. On the starboard side right in front of the quarter deck is Paddy seated on a barrel piping away some favourite Irish jig on his Flute and surrounded by a group of all sorts and sexes, while a couple are in the centre of the circle footing it away and endeavouring to keep time to Paddy's notes.

Farther along the deck amidships are two or three brisk young lasses laughing away to the jokes of two sailors who seem to be pouring sweet poison into their ears. On the other side of the deck (Larboard) are a group seated on the water barrels wilting away the time in the whiffs of tobacco smoke, quite uninterested in what others may be doing ahead of them; or at the bows of the ship are different groups of Females, some occupied in washing, others in sewing while the lazier portion are laying on the forecastle basking in the sun. On the top of the Cook's Gallery is seated a Group of Youths busily engaged at Spoilt Five. (An Irish game of Cards) while the remaining portion of the Passengers are busy cooking their meals and the children playfully running about. On the quarter or raised poop deck may be seen our Cabin Passengers employed in various ways also endeavouring to while away their time. The Capt. may be found below pouring over his chart & reckoning the distance made. The Man at the Wheel, the Dutch Carpenter chopping away at a piece of wood, & the two sailors amusing themselves with the girls seem to be the only portion of the ship's crew busily employed.

Sept. 21 [21 September 1849]. Good breeze from East. Ship going gallantly along, rate 9½ knots. Opinions regarding when we shall arrive at New York and if before the ships 'West Point' and 'Isaak Wright.' Gov. requests me to hook a bet between him and Capt. Snow. Two bottles Champagne regarding our arrival & that we will get in before either of the above Ships which left Liverpool on same day as we did.

Sept. 22 [22 September 1849]. Wind east, but rather moderate passing the Georges Bank. Now within two days sail of New York, should the wind keep favourable. This is washing day. Ships Crew and Passengers all busy scrubbing to appear neat and clean on arrival. Main and 'tween decks in horrible disorder, which fully illustrates the old Scotch song, 'There's na' pleasure in the hoose upon a washing day.' To add to the discomfort the Ship keeps rolling from side to side splashing the Slop water on the Passengers, & sometimes capsizing one Passenger over the other slop in amongst it.

Sept. 23rd. Sunday [23 September 1849]. Morning beautiful but towards midday began to blow & wind chopped round dead ahead, West, and began to blow pretty stiff. Obliged to put on North West Tack. At 6 P.M. all hands ready about ship.

This is a very beautiful operation when well performed. When all is ready for

the sailors to stand by the weather and Lee braces, the Capt. orders 'Helms down.' He then gives the word forward 'Helms a-lee' which is answered by the Mate who lets go the head sheets. All being now ready the Capt. then gives the word 'Main Topsail haul' Away flies the Lee braces while the Weather braces are quickly hauled in by the men stationed on that quarter. 'Stand by the Fore braces' is then given by the Captain. 'Fore Bowling.' Fore Bowling is echoed. 'Let go and Land,' the Captain shouts & which is vigourously responded to by the Yo heave ho's of the men accompanied by the rattle of the blocks and tackle. Round swings the Yards and the Ship pays off on the other tack. 'Helms up' and away we scud with the wind on our quarter.

Sept. 24 [24 September 1849]. Stiff breeze with wind still ahead. Ship still making very little way towards her destination. Child 6 mos. old died thro the night. This child was almost reduced to a skeleton thro disease. Before it came on board, was past recovery. The mother was in much the same state and required some trouble to bring her round. 4 P.M. Steward taken suddenly unwell. Symptom Yellow Fever. 6 P.M. Pilot boat in sight and in Fifteen Mins. [the pilot] came on board. Reports the 'West Point' to have arrived at quarantine ground yesterday morning. Gov. rather chop fallen at losing his bet.

25th [25 September 1849]. This day was ushered in with an American Sunshine & Cloudless Sky. Wind still ahead but blowing pretty stiff and which kept us repeating the same manoeuvres as yesterday. Passed two or three ships apparently eastward bound. Came up with a Ship on our weather quarter beating up also for New York. The pilot says she is reckoned to be a very swift sailer and she seemed to give us the challenge by bouting ship and sailing on the same tack as we were, but in a few minutes we showed her our superiority of sailing by leaving her far behind on our lee quarter, and before sundown she was not to be seen. Visited sick before turning in, find all doing well except Steward who is vomitting severely.

Sept. 26 [26 September 1849]. Morning bright sunshine with good breeze on but still ahead. Seems as if it wished to keep us still out to sea. This makes now the Fourth day beating up against a head wind, since Sunday we have only been a few hours sail from New York, land being distinctly visible. Visited sick & inspected all the Passengers, find Steward greatly recovered, slept well. Pulse moderate.

All are now making preparations to land. Beds and every encumbrous article thrown overboard, dreadful slaughter among the Fleas, thousands supposed to be drowned. Anticipated reaching New York by the afternoon but the Wind having died away will detain us another day. Ship hove in sight bearing west proved to be the 'Isaak Wright' from Liverpool with Emigrants for New York. 4 P.M. Came in sight of Sandy Hook. Hove to and cast anchor, made signal along with Isaak Wright for steam tug. The Isaak W. succeeded in obtaining one and bore up for New York which rather chagrined our Capt. and Pilot at the Idea of her being in before us. Breeze sprung up towards evening accompanied by very heavy rain & most vivid lightning as every we beheld. Cleared away towards midnight.

Sept. 27 [27 September 1849]. Morning beautiful & fair with brilliant sunshine. Steam tug came alongside and we were soon again under weigh for New York city. Inspected Passengers before breakfast, found those who had been sick completely recovered, advised them to make a clean muster as we would soon have the inspecting Surgeon on board. Passengers all turned up and marched before him. At this

performance I was shook heartily by the hand by nearly all with many blessings and 'God speed yr. Honour for your attention,' 'Sure if it had not been yee's I'd been salt fish long ago,' & with many other kind wishes showered on my head. The inspecting Surgeon then highly complimented the Capt. and me for the clean and healthy appearance of the Passengers and pointed to the Isaak Wright and West Point whom he said had lost numbers of their passengers by fever, and which I have no doubt was caused by neglect. 'West Point,' deaths 26. 'Isaak Wright' deaths 28. 'Masconoma' deaths 37. 'John Hancock' deaths 1 and that only a child, sick before coming on board.

The Surgeon immediately gave us a clean Bill of Health. We sailed right up and after all was first into Port. 10 A.M. Got moored alongside the Judge Wharf & was immediately swarmed with Runners and Porters. Nearly got into Row with them in endeavouring to prevent them entering our cabins. At 12 o'clock went ashore & first time touched Yankee soil.

Frank MacShane is the great-grandson of the James Sutherland whose Journal appears in this number of NEPTUNE. He is a graduate of Harvard, Yale and Oxford and has taught English Literature at McGill, the University of Chile and Vassar College.

Notes

FINE FORESTS FOR THE NAVY

To the United States, this communication would be important, in congregating a set of hardy freemen on the frontier. In times of war, in transporting their troops, munitions and implements of defence; in preventing an illicit trade; in opening the fine forests of the north for its navy, and cementing the political bonds of union between the States.¹

It is a bit difficult to picture shock troops being rushed to the border on a flatboat behind a brace of mules; it is hard to see exactly how a canal could help customs men combat smuggling; and it takes a backward glance to recall that tall timber was once priority material in naval construction. These observations, quaint as they seem today, were entirely valid in 1825 when the fastest overland travel and transport might have been by canalboat.

Yes, problems of national defense and inland communication were surprisingly much in the news more than a century and a quarter ago. A tremendous network of waterways was conceived and planned, not only as a means of opening up the vast interior of the country but here, on a lesser scale, of guarding our Canadian border and tapping the forest resources of northern New England. To this end, indirectly, there was held in Windsor, Vermont, on 17 February 1825, a convention 'for the purpose of eliciting opinions and feelings relative to an improved navigation on Connecticut River.'² While canals were not specifically on the agenda of the convention, there stemmed from the meeting a request that the

Federal Government furnish engineers who would conduct preliminary surveys for several canals in the region, and by early summer they were on the job. The man in charge seems to have been one De Witt Clinton, Jr., Assistant Civil Engineer for the War Department, and undoubtedly the son of De Witt Clinton, then Governor of New York, whose enthusiastic promotion of the Erie Canal was already a matter of record.

The younger Clinton first went to work on comparisons of three possible routes through northern Vermont, whereby Lake Memphremagog (and Canada) would be connected with the Connecticut River. He also studied the possibility of a canal alongside the upper Connecticut where navigation of the stream itself would be impractical on account of an almost continuous series of falls and rapids. Lower down, the river leveled off somewhat, and he felt it could be used as an artery and outlet into Long Island Sound. If Portland and Boston interests were to be considered, he had also prepared a plan for a canal diagonally across New Hampshire into either the Dover or Merrimac River.

Further visions of canals in New England pictured a Boston and Albany waterway, and northwest passages between the Connecticut River and Lakes Champlain and Memphremagog. The latter two were very ambitious schemes and would have climbed over some of the highest ridges of the Green Mountains on their way across Vermont. They, like the other canals for which these surveys were conducted, were never built, but their proponents died hard, with the comment that 'Vermont will present the only obstruction to a water communication . . . from Boston to New Orleans.'³ Conquest of the highlands

¹ Report, dated 1 December 1825, of a War Department engineer on his canal surveys in Vermont and New Hampshire earlier that year.

² Spooner's *Vermont Journal*, February 1825.

³ Prospectus of the Onion River Canal, July 1825.

would have involved, in one instance, as many as ninety locks in twenty miles—virtually a stairway over the hump. An alternate route would have saved on lockage by providing a two-mile tunnel under the 'height of land,' while still a third proposition called for a ditch 67 feet deep, sliced right through a mountain!

Added to these topographical hurdles were the problems of hydraulics. In 1825 a canal could not be carried overland higher than the source of water. Brooks, springs, swamps—all had to be lined up as feeders, and their volume of supply calculated. Ever present, too, were unpredictable factors of floods and droughts. Direct routes were not always selected for these waterways for it was sometimes better to add mileage and take advantage of lakes and ponds where sail could be hoisted, or divert the barges over to some quiet reach of a river to float and pole a few miles along the fairway.

Expense figures would have been staggering for those days. Estimates ran as high as \$858,000 for the link between Lake Memphremagog and the Connecticut River, and over \$731,000 for the canal across New Hampshire. Excavations were figured to run from ten cents a cubic yard through light soil to one dollar through rock. The cost of the two-mile tunnel alone would have come to \$130,000. And yet the idea of canals over the mountains found many more supporters than skeptics, while financing through public and private subscriptions, with maybe a little backing by federal grants, was judged entirely feasible.

These canals in northern New Hampshire and Vermont, however, got no further than the stage of initial surveys. Had they been built, they would have certainly shared in the national defense effort for a few years before the railroads offered serious competition. The Canadian border probably would have remained unchanged, but several ships of the United States Navy would have been

constructed of timber felled in inland forests of New England. As it was, a good deal of that wood probably got down to rivermouth anyway, but the Navy may well have had to look about for other major sources of supply.

Mr. Clinton's report, from which the first paragraph of this article is quoted, was completed by the end of that year (1825) and transmitted, with a letter from the Secretary of War, to the 1st Session of the 19th Congress. There it was read on 12 April 1826, and 'laid upon the table.' That it lay there a long while is not as surprising, perhaps, as the confident hopes and vigorous ambitions it expressed.

SE. W. JACOBUS

ROBERT FULTON AND THE BEGINNING OF MODERN MARINE TRANSPORTATION

1808-1958

THIS year, 1958, is the one hundred and fiftieth anniversary of the inauguration of the first successful steamboat line, and the registry and patent of the first successful paddle-wheel steamboat in America, starting with Robert Fulton's *Katharine of Clermont* on the Hudson River. The launching and trial trip of this boat had been made the previous year.

Every American should be justly proud of Robert Fulton whose persistent efforts contributed so much to the development of submarines, steam navigation and other inventions of very great benefit to the world; his efforts took long hours, the work was tedious and costly but he alone realized the importance of this work.

Robert Fulton was born in Lancaster County of Scottish and Irish lineage and is said to have started working at the age of seven. He was a deeply religious young man, and others of this name have preserved all such noble traits. His first earnings were used to purchase a farm for the support of his mother. Very early in life Robert Fulton became a painter of miniatures and oil portraits. He went to England and

studied with Benjamin West who was a member of the Royal Academy. Later he went to France where he changed his interest to engineering experiments with special interest in submarines and torpedoes; he also made his first successful experiment with a steam engine and paddle wheels at Paris on the Seine in 1809. This experimental vessel later sank. Fulton returned to this country and turned to canal navigation; then to the application of both sail and steam for navigation of rivers.

The construction of his first experimental boat in this country, *Katharine of Clermont*, started in 1806. The launching and later trial run of this steamer was made on 17 August 1807. This boat, 113 feet long, 18 feet breadth, seven feet depth of hold, and 160 tons, was named for Robert Fulton's wife Katharine who was a daughter of Chancellor Livingston of Clermont Manor on the Hudson. She was the first boat that successfully demonstrated the practicability of using steam to propel vessels for commercial purposes. The engine was a crosshead bell crank type of twenty-four horsepower, made in England by the famous Watt and Bolton. The first successful voyage of *Katharine* was in April of 1808, just one hundred and fifty years ago. This steamer was later known as *North River of Clermont* but the name *Katharine of Clermont* was originally painted on her sides. She was rebuilt and many improvements had to be made on this vessel; after several trial runs *Katharine* was ready in April 1808 for another trial trip; the description of the boat and this trial trip with both sail and steam is well known.

It was this steamboat that thrust civilization years ahead; a successful experiment of mechanical propulsion that became an established fact and reality. Fulton's accomplishments were patented in 1808 and he became one of the most important engineers of the time, just one hundred and fifty years ago.

Though Robert Fulton was not the inventor of a steamboat or engine in

the sense of Fitch, Evans, Stevens, Rumsey, Symington, Nathan Reed and others, all of whom had constructed vessels and applied steam to paddle wheels or propellers, he was the first to persevere with the practical application of the steam engine in the construction of his vessel *Katharine of Clermont* establishing the first regular steamboat line in the eastern part of the United States and probably in the country. By the year 1815 Fulton had constructed twenty-one steamboats, most with the combinations of both sail and steam. He also built the first steamship of war constructed in the world which was christened *Fulton the First* and the inventor became nationally known.

So great was Fulton's fame that the Erie Canal was not started until he had been consulted and approved the plans. Fulton died at the height of his career 23 February 1815, and the nation mourned at the passing of the father of marine transportation. Three years later the auxiliary steamship *Savannah* crossed the Atlantic Ocean using both sail and steam; though the paddle wheels were used little on the voyage this was the second greatest event and stride in the development of marine transportation most of which has disappeared from our harbors, rivers and bays.

The great possibilities of marine atomic power are endless and they go back to the experimental and later practical theories of Robert Fulton in Paris who became one of America's first and greatest engineers. He contributed much indeed to the great strides and progress of the world.

The first steamers constructed for Robert Fulton were:

<i>Katharine of Clermont</i>	1806
Rebuilt during winter of	1807-1808
<i>Car of Neptune</i>	1807
<i>Paragon</i>	1811
<i>Jersey Ferry Boat</i>	1812
<i>Fire Fly</i>	1812

and others followed later.

VINCENT SHORT

THE *Mayflower's* JONES

MR. GERSHOM BRADFORD'S article in a recent issue prompts me to contribute additional data on *Mayflower's* courageous captain.

Captain Christopher Jones was buried in St. Mary's Church, Rotherhithe. The church register reflects that he lived with his wife Joan in Rotherhithe for some eleven years. Under date 'Anno 1621 (21/22) Burials,' the entry occurs, 'Christopher Jones bur: 5 March.' Letters of Administration of his estate were granted to Joan Jones, relict, in August 1622, and he is described as late of Redriffe, Co. Surrey (an old form of Rotherhithe). His voyage with the Pilgrim Fathers would thus have been very nearly, if not quite, his last.

It appears Christopher Jones had four children. St. Mary's records show that Roger was baptized in 1611, Christopher in 1614, Joan in 1615, and Grace in 1618. Another entry indicates Grace was married in 1636 to a Nathaniell Newbury, while the entry of the burial of Joan Jones on 15 June 1673 may refer to Captain Jones's widow.

I do not know if any honor has been given the resting place of Captain Jones in Rotherhithe, but it seems appropriate that some historical organization might consider erecting a tablet to the memory of a man who safely brought about the first permanent settlement in New England.

CAPT. EDGAR K. THOMPSON

"TWO MEN AT THE WHEEL"
THE BARK *Carlotta*, MAGUNE, MASTER

BUILT at Quincy, Massachusetts, in the year 1856, the bark *Carlotta*, was of 310 tons, 110.3 feet long by 27 feet beam, with a depth of 12.9 feet. During most of her career she sailed under the British flag, mostly in the West Indies trade. Her signal letters were NGHR in the International Code. Little else is known of this vessel except for a bound manu-

script volume, 'Statement of Partial Loss—Case of the Bark *Carlotta*, James William Magune, Master.' This journal is an 'Abstract from Protest' and is a complete survey of the damages incurred when *Carlotta* encountered a terrific gale off the English coast in 1874 and was almost lost with her crew. It so happened that one man was lost overboard.

On 5 December (1874) we read, 'About 1 PM the wind changed to the West and the weather became cloudy and threatening with a short quick sea.' At 6:00 P.M. on the same day the vessel was making considerable water, which caused the pumps to be going steady. This gale continued throughout the six days, increasing in severity.

December 8:—At 2 PM the well was sounded and it was found that there was 2 feet of water.' Following this discovery all hands were called and the ship 'was bore up for a Port of refuge. Two men were at the wheel and the rest of the crew engaged at the pumps.'

The following day the gale increased and a heavy cross sea was running which made navigating extremely difficult. At this time the fore topsail was blown away and the main topsail split and was cut down. 'Headed to the North under mizzen Staysail to keep her clear of the French coast.' At 6:00 P.M. a tremendous sea broke over the ship and swept the decks of everything movable. At this time the bulwarks were severely damaged as was the cabin companionway. The cabin was flooded with two feet of water, the binnacle, compass and lamps were carried away. The water casks were ripped loose and were adrift which made work on the deck extremely dangerous. It was necessary to cut a hole in the cabin to allow the water to flow into the hold, so that the pumps could rid the vessel of the excessive amount of water.

All of the crew, with the exception of 'two men at the wheel,' and one, 'Frederick Campbell, who was disabled, were at the pumps.'

The following day (10 December),

Carlotta 'lay to under mizzen staysail.' Due to the extreme violence of the gale, she shipped large quantities of water. Examination of the water in the hold revealed that the vessel was leaking badly and that the chain bolts 'had started out 3 to 4 inches.'

On 11 December the gale continued in severity with no sign of abatement. While the men were still at the pumps, they were nearly exhausted from their work and 'lack of food and rest.' Early in the morning of 12 December, land was sighted bearing N by E, about ten miles distant. The vessel now changed her course, E by N $\frac{1}{4}$ N and headed for Portland (on the English coast) harbor. While the sky cleared the gale continued and the men were still at the pumps. At noon *Carlotta* rounded Portland Bill; at this time the tide was running to the west 'with full force and owing to the strength of gale and of the tide it was found necessary to keep two men at the wheel.' The Captain ordered Boatswain John Gustoff Grandrose forward to cast off the stock lashings from the anchor but the anchor slipped from the bow and Grandrose fell overboard.' The Captain said, 'I saw Grandrose rise astern about 10 yards off and threw him a life buoy but the sea broke over him and he sank before reaching the buoy. That owing to the violence of the gale and

the vessel being so near to the shore, it was impossible to heave to and get out a boat to go to his assistance without hazarding the lives of the crew in the boat and placing the vessel in a most perilous position.'

Carlotta proceeded on her way after this accident and when off Portland Breakwater, she picked up a pilot and proceeded into Portland Roads. Here she was pumped out and on 23 December proceeded to Wymouth for survey and complete repairs.

Survey:- February 3, 1875:-

This day repaired along side and on board and find that the portion of the cargo which had been discharged has been reshipped and on sounding the pumps find the ship making no water. The repairs and supplies recommended by us have been made with the exception of the Manila Hawser. We now consider the vessel perfectly tight and seaworthy and recommend that she proceed at once on her intended voyage.

Signed:- William Roberts.

Surveyor of Shipping.

F. W. Mace. R. A. Ayles.

Harbor Master. Ship Builder.

The insurance claims were evidently taken up in the United States as the adjusters were Francis B. Davis and J. P. C. Winship, 'Counsellors at Law and Adjusters of Marine Losses,' 103 State Street, Boston, Massachusetts.

L. LEE DORSETT, M.D.



Documents

A WHALER'S LETTER

IN order to gather data for 'Whale Charts,' that is, charts plotting the migrations of whales, so that America's prosperous whaling fleet could be reasonably certain of where to go at different seasons to make a catch, Lieutenant Matthew Fontaine Maury asked that whalers send him information about their voyages. The following is one of the letters he received in response to his request. Maury, of course, hoped for exact locations and dates of kills, and for fairly detailed and precise meteorological and oceanographical data. He expected to get this from the whalers' logs and he hoped to persuade them to keep logs such as were kept on merchant vessels by way of payment for the use of the 'Sailing Directions' and 'Wind and Current' charts. Maury certainly didn't get usable facts in this letter, and even the writer knew this but all the same he couldn't resist the impulse to tell his rambling sea stories which, if not useful to science, give some insight into the human side of whaling.

The writer, Lucius H. Vermilyea, appears to have been well read in whaling treatises or literature of the sea, for now and again the clichés of the day appear (possibly he had literary aspirations himself), but for the most part he tells a plain (if digressive) tale with a good deal of spirit, and in reading it the varied aspects of whaling life emerge clearly. The distances covered, extremes of climate and scene, the strange and far-away places visited, the exotic names (individualistic spelling heightens the effect here and gives the impression that the writer felt that they were exotic

places), the high adventure, the killing labor, the fearsomeness of the storms, the ever impending presence of violence and death, and, above all, the awesomeness of the whale itself, the taking of which, I'm sure, gave few people the feeling that they were just putting in another day's work, makes one see something of the lure that the life held out for men like Melville, Scoresby, Browne, Bennett, and Vermilyea.

U. S. Steamer Merrimac
Realejo, Nicaragua
Jan. 31st /59

M. F. MAURY, L. L. D., LIEUT. U.S.N.

Sir, although a stranger to you, I am not to the great & deserved reputation which you have acquired, especially among Navigators, & it is with no small amount of diffidence that I summon up courage enough to address you this letter. This feeling is not diminished when I reflect upon the small prospect there is that anything here will be either new, or useful, or of interest to you. But as you requested in your 'SAILING DIRECTIONS' further information from whalemens & as I have followed that business for the last 8 yrs on as many different ships, I write this, premising with the N. Bedford master that your fire burns brightly & that should these outlines & sketches prove worthless, you will know what to do with them. I read in the Sandwich Islands papers, an account of the wonderful success of your predictions in regard to the sailing of merchant vessels from N. York to San Francisco, calculating within a few hours when following your directions, the time of making a passage so many thousands of miles, around C. Horn & through so many variations of climate & weather. This was truly regarded as a wonderful triumph of science, & though uneducated myself I can appreciate its use in others & as an American, felt proud to hear of your success in the distant Isles of the Pacific. The 'Friend' & 'Commercial Advertiser' of Honolulu both printed my letters from the Coniac & Arctic about whaling. The former is an old established paper containing much valuable information about whaling & if you desire it & can give me directions who to send them to so as to avoid postage, I will order bound volumes for the last 10 or 12 yr's to be sent to you. About the dates, wind, temperature &c which you desire I have no log to extract from but memory & can only give a general account of my own experience, without

those more important details, which alone perhaps are the main things you wish to ascertain. I will therefore endeavor to be plain & brief so as to consume as little of your valuable time as possible.

I sailed from N. Bedford in June 1851 under the late Capt. Cromwell of Holmes Hole Marthas Vineyard, an old experienced whaler, much respected by an extensive acquaintance. He recently lost his life in doubling C. Horn by a fall from the rigging in a gale of wind. We took one Sperm whale of 90 odd Bbls. near the Western Islands, but the carpenter pulling the tub oar lost his leg by the line. The whale was very quiet & capsized the boat which was on his small unintentionally, when he rounded to go down. He soon came up again & was easily killed. The carpenter was taken out of the boat by a turn of the line around his leg, shattering it badly, so that the bones protruded like the tines of a fork. Nothing further occurred in the whaling line until off the river La Plate, when a large school of several hundred were seen, the boats lowered & one fastened to which stove & capsized the boat whilst another boat fared the same fate from a loose whale. The remaining boats brought them aboard leaving the whales masters of the field. We next made C. Horn & were 17 days in rounding it, experiencing a gale which the Capt. during 30 yr's at sea had never before seen equalled. The ship was at times nearly on her beams end, new sails were torn off in a few moments, flapping like the report of musketry, the starboard boat was carried away, the galleries blown over & the Officers & watch on deck lashed themselves to the mizzen rigging. It was dangerous & almost impossible to walk the length of the ship even by holding on the rigging & the watch relieved each other in the steerage. Two men were thrown over the wheel & another from the main cluginet across the deck over the booby hatch into the lee scuppers. Streaks of spray like fire were constantly passing over the fore yard, & from the wheel, the black mass of rolling water, fringed with white, was elevated above the stern to nearly the height of the mizzen top. This lasted but one night & next morning we found ourselves in 65° lat. with a cold clear sky & a few inches of snow on deck. I have been informed that this same Capt. who was destined to perish in doubling that cape, ordered some of his officers or men to go on the main yard when they refusing, he went himself, was thrown on deck & killed. A Portuguese on another whaleship was thrown off the fore yard & his brains dashed out on the deck in doubling that cape. Sperm whales are sometimes seen & taken there & I knew a young man who was 2 hours in the water on an oar from a capsized boat the others chasing & capturing the whale.

After rounding the Cape we kept off to the

westward to a right whaling ground & saw plenty of whales, but it was constantly rough & after several days of unsuccessful whaling, we put off for Juan Fernandas, thence to the Isle of Chiloe, then to 'Hump back Bay' Desert of Atacama, & from there to Hilo, Owyhee. On the last passage between the coast & place of crossing the line we took a 50 Bbl. Sperm whale from a school making a passage. Near the line we had light winds or calms for several days & came across a large school of Blk fish, taking several of them. I next went to the Ochotsk & in 3 months we took 2500 Bbls, 1700 of it in the sea around the ice & near Jonah's Is'd & the rest in bays. The whales all leave for the bays about the 1st of July. The ice at Shanty Is'ds in lat 54° & 5° sometimes remains the whole season & ships generally cannot get in there before the middle or last of July, whilst at North Bay & in the N.E. Gulf in 60° North the water is free of ice much earlier. The reason I suppose is because of the shoal water & strong currents around those Islands. These currents are very irregular running 1 or 5 hours one way & 8 or 9 the other. When strongest boats in pulling against it generally drop anchor & whales are necessarily anchored until the current sets favorably for the ship. It sometimes blows very hard there to the great danger of ships, in ice, fogs & currents, in shoal water & narrow passages, with bold rocky lee shores. I will give my own experience on the ship Herald of N. Bedford Capt Slocum in 1854. We were anchored in little Shanters up a narrow passage or gulf in 8 or 9 fathoms of water. But one other ship the Empire, Capt. Henry lay near us though 8 or 9 were anchored in sight further out. Whales were plenty but small making from 15 to 75 Bbls. They go close in shore by the rocks sometimes laying in the breakers to conceal their spout. It is often very foggy there & at Mercury Bay in 1855 from the 1st of July to the middle of Aug. there were by the ship's log but 13-1/2 clear days. It commenced blowing with fog the 19th of Aug. & lasted 3 days. We were off in the boats at the time but all of ours & 3 of the Empire's succeeded in reaching that ship. Her 4th boat put for shore & the crew were subsequently taken to Honolulu by another ship. The 1st two days no great fears were anticipated, 3 anchors were let go & all the cable in the ship, the windlass lashed by means of a heavy cutting falls to the main & mizzen mast & everything made secure. We had 3 whales in the blubber room when the storm commenced & that day they were seen by hundreds, spouting & breaching in every direction. I have noticed that whales are most numerous & approach nearest to the ship in a storm. The 3d day the storm was at its height. The flue of one anchor had parted the night before & when the wind & current swept together the ship was dragging but when op-

DOCUMENTS

posite she did not. The topgallant yards were sent down & 50 Bbls of blubber pitched out of the blubber room overboard & to clear the decks, casks, tubs, & Bbls, followed suit. The axes were ground to cut the masts. A bold rocky lee shore was but a short distance off. About noon the Empire was seen through the fog under sail passing near us. To heave up anchor before we should be ashore was impossible & the cables were all broke at the Haws Holes as the mainsail & close reefed topsails were set. For a moment she staggered but soon righted & slowly made way. We had to beat in the fog through the night in a narrow passage & next morning found us drifting helpless in a calm without cables or anchors. By an oversight no Buoys were attached & they were lost. We had to leave 6 weeks before the season was up with 500 Bbls, about the average of the fleet, though in 1852 both the Ochotsk & Arctic ships averaged 1500 Bbls each, & with the exception of -/54 the Ochotsk fleet has averaged 1000 Bbls pr. ship, though the Arctic soon run out. The immense quantity of oil taken from the Ochotsk & Japan can scarcely be credited & is accounted for by the large extent of the former with its extensive coasts & numerous bays, gulfs, islands & shoal places where ships can with difficulty go & making it impossible soon to clear the sea of whales. At the Channel of Tartary ships cannot get within a long distance of shore on account of shoal water, & it requires a good breeze with togan-sels set to make headway against the current. In 1854 the ice near the east of Kamtschatka shore was piled up as high as the topgallant cross trees & we sailed alongside of it with a light breeze in smooth water $\frac{1}{2}$ a day. I never saw this but once in that sea though I was there 5 seasons in succession from /52 to /56. The casualties in /54 were numerous. The 'Northern Lights' lost 2 boats crews, the 'Copper' 3 men capsized in a flaw & carried from the boat by the current & the 'Goleanda,' 3 out in the sea near the ice. These last were lost in a thick fog about $\frac{1}{2}$ a mile from the ship & within hearing of another boat, also chasing whales which supposed the cries were cheering from a fast boat. They had fastened but got capsized & getting on the bottom of the boat, they remained until 3 of them chilled through, got sleepy & fell of & the others were found helpless & carried aboard. Capt. Lamphere of the 'Lagoda' was also lost in the current at Shanters by the upsetting of a boat.

Bo heads as far as my experience goes, are a dull, heavy, sluggish fish & I have seen hundreds fastened to & killed without their lifting their flukes out of water, but if they sound deep they will take out line with astonishing rapidity. The largest one I ever saw was in North Bay & made 225 Bbls. One of our boatsteerers fastened to him with a single iron, he took the

line was next seen a mile or so distant & was picked up a 'dead whale' a day or two after. They are the easiest of all whales & a 'devil fish' or 'California Gray' alias 'Muscle Digger' or 'Scamper Down' is the hardest. Bo heads have longer, smoother & wider bones than Right whales, but not so thick. The former will average 15 lbs. to the Bbl. but right whale only 10 or 12. We picked up on the Brk Sarah Sheaf, Capt. Looper in 1857 a 'dead Bothead' in Bristol Bay which made but 100 Bbls, whilst the bone weighed 3300 lbs. I have seen as long bone before, but not so wide or in such an immense quantity. The largest slabs weighed 14 lbs & one was sent from Honolulu to the Emperor of Russia. He had probably been dead some time & considerable oil wasted, as the bone was loose & fastened together by ropes to get it on deck. Bo Heads & Sperm whales are not common in Bristol Bay or the Coniac but several schools were seen that year & the Brk Prudent, Capt. Hamilton, took a 100 Bbl. sperm out of a large school making a passage near Mt. St. Elias. Right whales, fin backs, & humpbacks are the regular whales there.

Right whales make more oil than Boheads & Capt. Parsons took 2 that year which made 500 Bbls & several were taken which made over 200 Bbls each. They are longer with a more tapering small & more active with their flukes than Boheads. One of Capt. Parsons' boats was cut in two & smashed totally to pieces killing the boatsteerer instantly, & the whale though spouting blood was lost. But 'Devil Fish' carry off the palm as fighting whales. They are taken principally in Margarite Bay, L. California, where 20 or 30 ships go between seasons from Nov. to March, instead of Right whaling to N. Zealand or cruising for Sperm on the line. They come down the coast from the Arctic & reach the Bay about the 10th of Jan. leaving in a body the last of Feb. They come there to calve & formerly none but cows with calves were taken, but lately bulls are attacked also. It is hard and dangerous work & several lose their lives every year. Ships are pretty sure of getting something from 3 to 800 Bbls but there is no bone & the oil has recently fell in Honolulu to \$9 pr. Bbl.

I was overboard on ones back season before last but providentially escaped. We had pulled for him an hour or two in the hot sun, straining every nerve & the sweat pouring from us, following him in shoal water along shore of but 3 or 4 fathoms by his wake, when the calf gave out & the cow was struck. We had lost the strength immediately to stop the boats headway & stern off & she came head on at the boat. They all, Officer, boatsteerer, 8 men jumped overboard & swam to another boat except an old man-of-war's man (Brown) & myself. When I did jump by some mistake I went the wrong way for the other boats & after swimming a

few rods found the whale coming up under me. I was in the boiling suds & had my hands on the calf which probably saved my life as they will not strike to endanger their calf. The Officers & men were singing out for me to take care of myself & one of them (Welles) was himself killed last season in the same bay. He was lancing a whale & lost his balance falling overboard the whale saw him & swept him down with his flukes. He was not seen again. I immediately left the calf & swam for the old boat but was so exhausted that Brown had to help me in & I was hardly over the gunside before the whale came again & knocked Brown out, grazing his nose with the whales flukes & slightly drawing blood. I helped him in & the whale came again 10 or 15 times smashing the oars, but the water was so shoal she could not do much with the boat. The calf now strayed off & I saw by the straightening of the line, the cow was following after. There were but 2 coils left in the tub & Brown taking 2 turns around the loggerhead held on while I prepared to back water with a piece of an oar. Off we went sailing across the Bay without oars, Officers, boatsteerer; & but 2 mor men the other boats in chase. The calf stopped the other boats came up & taking the line captured the whale. They make about 40 Bbls. I never was overboard but one other time, stove & capsized by a sp'm whale on the line. We had struck the calf & the cow upset us after smashing the boat. We lost 300 fathoms of line & got neither.

I have been 3 times to N. Zealand, to Wykaturuk, Oratonga, Otaheita, Pleasant Isl'd, Rude-ma, Ocean Isl'd, King Mills Group, Straights & Wellington Isl'ds Ascension & Guam, sighted the Loo Choo & Bonin Isl'ds & passed through the Yellow Japan & Kamtschatka seas into the Arctic & 400 miles up the Gulf of California since leaving the States 8 years ago. I could give quite an account of the natives productions &c. of those islands, but as I presume this would be of no use in your investigations & that you want facts & figures obtained from logs & instruments which latter few whalers carry or if they do seldom use I shall refrain hoping that you will excuse this letter which contains so little of the information you desire. Were whalers in possession of proper instruments & so disposed they could pick up more truly useful information for you than any other Class of men but the love of gain is a barrier as it might put them to some inconvenience & the owners exercise great influence over them.

I had intended to have given the general state of weather & passages without precise dates having crossed the 40th N. Lat. 14 times & also about the routes of whales, the time the ice generally leaves the straits into Ochotsk Arctic, Bristol Bay &c &c but I am a little suspicious that anything I might write would be of no account to you & so defer it. If otherwise

I shall gladly communicate any little practical information gathered from experience at your request. Should you condescend to honor me with a reply direct to me, U. S. Frigate Merrimac, In care of U. S. Consul Panama.

I am &c
L. H. Vermilyea
Actg. Clerk, U.S.S. Merrimac

[This letter is in the Records of the Naval Observatory (RG 78); Letters Received, in the National Archives, Washington, D. C.]

Contributed by Joseph B. Howerton

GENERAL GLOVER STOWS SOME FISH

AUTHOUGH General John Glover of Marblehead is best known for his military exploits in the American Revolution, he was likewise a significant figure in his peacetime pursuits as a merchant mariner. Indeed, Glover ranked among the most prominent businessmen in Marblehead.¹ Purchasing a lot along the Beverly waterfront that is known as Glover's Wharf down to this day, this shrewd, stocky little Yankee conducted a thriving trade.² For eight months out of the year, the fishing craft he owned plied the Banks.³ Then, the fish his vessels brought in were traded in the West Indies, Spain and Portugal or sent to the other continental colonies to be exchanged for commodities that Glover could sell to the local townspeople.⁴ This pattern of trade yielded him a small but hard-won fortune before Glover marched off to war at the head of his regiment in 1775.

¹ Harriet S. Tapley, ed., *Early Coastwise and Foreign Shipping of Salem* (Salem, 1934), p. iii.

² Glover purchased this property in 1774. See Essex County Probate Records, Essex County Court House, book 139, leaf 238.

³ Sometimes these trips ended in disaster. A newspaper account in 1771 related that one of Glover's schooners was run foul by another vessel on the fishing grounds and was sunk. See *Boston Evening Post*, 27 May 1771.

⁴ For the vessels Glover owned and the cargoes that he carried see Abstract of English Shipping Records Relating to Massachusetts—From Original Records in the Public Record Office, London, III, 1120; IV, 1368, 1342, and 1349, in Essex Institute.

When he retired from the army in 1782 because of ill health, Glover turned once again to the industry he knew best, the fisheries. He had to begin anew, however, because he had disposed of all his vessels in order to invest his capital in government securities.⁵ Slowly Glover rebuilt his shattered business in the postwar period. By 1785 he was the proud owner of a new schooner, and by 1787 he was operating a small fleet of three fishing vessels.⁶ Although he suffered some reverses in the depression that gripped Massachusetts in the late 1780's, Glover managed to pursue an active business career down to the time of his death in 1797.

The following letter written by Glover to John Coffin Jones, a wealthy Boston merchant, indicates the thoroughness with which the Marbleheader carried on his business enterprise. Like every other cargo, fish had to be stowed in a certain way for the best results, and this document contains the rules Glover followed when loading his ships with fish.

Marblehead 25th May 1787

John Coffin Jones Esq

Dear Sir

At your request I hereby transmit, Some general rules, for preparing a vessel to receive a cargo of Merchantable fish, also for shipping ye cargo, which in my opinion ought to be attended to.

⁵ John Glover to [Benjamin] Lincoln, 15 May 1783, Marblehead Historical Society.

⁶ John Glover to M. M. Hayes, 15 February 1787, in the possession of Russell W. Knight of Marblehead; transcript of letter John Glover to Benjamin Brown Merchant in Kennebunk, 31 May 1785, in Essex Institute.

First—The hold washed clean and well dried; and if she be a double deck & what the seamen call a tender side, She ought to have Shingle or Small ballast, from her bows, aft to Ye run, & Levell with her keelson, and if she has a flatt bottom, it would be best, to raise ye ballast four inches above; there lay a platform, with Season'd boards the edges to be lap't or the joints covered with boards, then clapboard her hold, thick edges reverst, from each side of ye platform to the deck; thus prepared you may begin to take on fish which out[gh]t to be done in fair weather & NW winds.

The fish to be Stowed in three bulks, one forward: One aft, the forepart of which, to come Square, with the forepart of ye vessel; the reason I recommend the hold to be Stowed in this manner, it being very convenient when the fish comes near the deck beams; that the midship bulk should be the lowest, in that case, the fore and after bulks can with much greater ease be filled out; while the midship bulk will be Setting and of convenience the vessel will Stow a greater quantity of fish—Besides those advantages the master will find absolutely necessary, when he comes to discharge his cargo as the midship bulk may be taken out, and ballast taken in before her whole cargo is discharged which may be (as the Seamen's phrase is) to keep Ye vessel on her legs, necessary as too much care cannot be taken in Shipping a Cargo of [Spiking:] fish—I would further recommend the fish to be passed from hand to hand from Ye boat or vessel that brings it alongside ye ship in small parcels not exceeding six or eight at a time, till it comes to the man that Stows it away on Ye bulks—which should be Stowed rounding with Ye deck—that is ye middle of the bulk should always be kept the highest, as the fish will press better & lay much easier—I don't recollect anything more at present necessary, to be said on Ye subject and am

dear Sir

Your most ob[edient]t H[um]ble Serv[an]t
Signed,

Jno Glover⁷

⁷ Transcript of letter John Glover to John Coffin Jones, 25 May 1787, in Essex Institute.

Contributed by George A. Billias



BIBLIOGRAPHY

Recent Writings in Maritime History

BY ROBERT GREENHALGH ALBION

THESE bibliographies are designed to include all pertinent books and articles in English, except for articles in THE AMERICAN NEPTUNE itself.

Abbreviations: *RUSI*, *Journal of the Royal United Service Institute*; *SBF*, *Steamboat Bill of Facts*; *S&S*, *Ships and the Sea*; *USNIP*, *United States Naval Institute Proceedings*.

All dates 1958 unless otherwise indicated.

I. General

CLARKE, A. C., *Voice Across the Sea*, 268 pp. \$3.75. New York, Harper. Transoceanic cables and radio.

COLE, W. A., Trends in Eighteenth-Century Smuggling, 16 pp. *Econ. Hist. Rev.*, April.

DUFF, D. V., *Ships of the World*, 158 pp. 75 6d. London, Nelson.

FORESTER, C. S., Wooden Walled Hygiene, 3 pp. *Proceedings of Merchant Marine Council* (U. S. Coast Guard), Vol. 15, No. 5.

GIBBINGS, T. H., Rushing the Transatlantic News in the 1830's and 1840's. *New York Hist. Soc. Quar.*, Jan.

HOLDEN, E. C., Jr., Admiralty Cases. *Insurance Advocate*, 28 June. This issue contains several other maritime articles including ship repair costs, loss and damage transit claims, 'Savannah,' and the St. Lawrence Seaway.

LA DAGE, JOHN, How a Ship's Stability is Checked, 2 pp. *S&S*, Fall.

—, What Do You Know about Load Lines, 3 pp. *Ibid.*

LAUGHTON, L. G. C., A Nautical Dictionary, 11 pp. *Mariner's Mirror*, Aug. Discussion of the original project of the Society for Nautical Research.

LEONARD, A. G. K., 'Hall Mark of Safety,' 11 pp. *Sea Breezes*, May. Sketch of Tyneside shipowner 'who planned and initiated the shipping reforms adopted by Samuel Plimsoll in their entirety.'

MANICA, P., *The Italian Code of Navigation, Translation and Commentary*, 475 pp. 42s. London, Sweet.

WHEELER, G. J., RN, *Ship Salvage*. 17s. London, Philip.

II. Exploration, Navigation, Cartography, Oceanography

BULWER-THOMAS, IVOR, Columbus, the Western Route. *Times Literary Supplement*, 6 June.

CYRIAX, R. J., The Two Franklin Expedition Records found on King William Island, 11 pp. *Mariner's Mirror*, Aug.

HALL, H. O., see Sect. XIV.

LINK, E. A. & M. C., *A New Theory on Columbus's Voyage through the Bahamas* (Smithsonian Misc. Coll., Vol. 135, No. 4), 45 pp. 90 cents. Washington, Smithsonian Inst. Further develops the theory advanced by Capt. Verhoog (XV, 85) that Columbus landed first on Caicos rather than Watling Island.

LLOYD, CHRISTOPHER, et al., Ocean Voyages of the Past, 3 pp. *Mariner's Mirror*, Aug. Comments and additional data re Söller & Marcus article on dead reckoning (XVIII, 254).

MACMILLAN, D. S., *A Squatter Went to Sea*, 165 pp. 16s. Sydney, Angus & Robertson. Story of the first Australian expedition to New Guinea under Sir William Maclean in bark 'Chevert' in 1875.

O'NEIL, PAUL, Beneath North Pole on a Well-Planned Adventure, 8 pp. *Life*, 15 Sept. Passage of atomic submarine 'Nautilus' under Pole on 3 August, based on mass interview of her crew, with numerous illustrations. See also W. R. Anderson, USN, et al., *Saturday Evening Post*, 27 Sept., 4, 11 Oct.

REINGOLD, NATHAN, see Sect. XV.

ROGERS, F. M., Valentim, Fernandes, Rodrigo de Sanatella, and the Recognition of the Antilles as 'Opposite-India,' 30 pp. *Boletim da Sociedade de Geografia de Lisboa*, July-Sept. 1957. 'Italian intellectuals provided the basis whereby the Portuguese could attain a mature understanding of their activity in the East. This mature understanding was transmitted to Andalusia. There it enabled Castilians to perceive the nature of their accomplishments in the West.'

ROSCOF, J. H., see Sect. XV.

SOULE, GARDNER, How They Found a Deepwater Northwest Passage, 4 pp. *SeS*, Fall. Feat of Canadian icebreaker and three U. S. Coast Guard vessels in opening practical passage, 6 Sept. 1957. See also W. G. Crisp in *The Beaver*, Spring, for 1928 preliminary episode.

SULLIVAN, WALTER, Eastbound River Found in Pacific. *N. Y. Times*, 21 June, 1, 44. Tracing of 3-knot current, 250 miles wide, 100-800 miles deep for 3,500 miles along equator from Marquesas to Galapagos underneath the westbound South Equatorial Current.

WALTERS, RAYMOND, JR., The Long Search for a Northwest Passage. *Ibid.*, 29 June, xi, 20.

WITHINGTON, SIDNEY, see Sect. V.

III. Merchant Sail and General Shipping—North America

BLAKE, J. W., Going to America, 10 pp. *History Today*, June. Part I, movement of indentured servants in colonial period.

BURGESS, R. H., Last Stormy Voyage of Sailer. *Daily News* (Newport News), 23 March. Pictures and account of voyage in 1937 of 'Edna Hoyt,' the 'last wooden five-masted schooner to cross the North Atlantic.'

CHASE, VIRGINIA, Murder in the High Seas, 7 pp. *Down East*, Aug. Detailed account of attacks of West Indian pirates on Maine vessels in 1820's.

CHECKLAND, S. G., American versus West Indian Traders in Liverpool, 1793-1815, 20 pp. *Jour. Econ. Hist.*, June. 'As the war continued, the relative decline of the West Indian, and the rise to new stature of the American traders brought about a change in Britain's ideas regarding the protective system.'

DAVIS, G. H., Competitors of a Century's Racing, 2 pp. *Ill. London News*, 23 Aug. 35 diagrammatic sketches and dimensions of America's Cup contenders since 1851.

LAFITTE, JEAN, *The Journal of Jean Lafitte*, ed. John A. Lafitte, 153 pp. \$3.50. New York, Vantage.

LEWIS, L. W., & STACKPOLE, E. A., Last Active American Square-Rigger, 1 p. *USNIP*, July. Comments on relative claims of 'Benjamin Packard' described as 'the last wooden square rigger of original American registry to round Cape Horn,' and James A. Farrell's 'Tusitala,' which was 'an iron square-rigger built in Scotland,' still later in operation.

LOOMIS, A. F., 'Ah, Your Majesty, there is no second!' 6 pp. *American Heritage*, Aug. Account of original America's cup race and its successors. Similar account by Maitland Edey in *Life*, 2 June.

(LYMAN, JOHN), Speed under Sail, 4 pp. *Mariner's Mirror*, May. Continuation of earlier arguments on clipper performance. See also Learmont, XVII, 317, and Daniel, XVIII, 255.

NEUBERGER, R. L., Bloody Trek to Empire, 7 pp. *American Heritage*, Aug. Includes voyage of Astor's 'Tonquin' to Northwest Coast in 1810-1811 and the founding of Astoria.

STONE, H. L., & TAYLOR, W. H., *The America's Cup Races*, 245 pp. 52s 6d. New York, Van Nostrand.

WHITRIDGE, ARNOLD, The American Slave Trade, 11 pp. *History Today*, July.

WIBBERLEY, L. P. O., *The Coming of the Green*, 184 pp. \$3.50. New York, Holt. This account of Irish immigration includes material on shipboard conditions, partially reproduced in *American Heritage*, June.

IV. Merchant Sail and General Shipping—Other Regions

BURSLEY, C., et al., The 'Potosi'—A Bid for Sail Supremacy, 11 pp. *Sea Breezes*, June. Account of German 5 masted bark in 1895 technical paper, together with account of her later career.

DOMVILLE-FIFE, G. W., ed., *Epics of the Square-Rigged Ships*, 271 pp. 25s. London, Sealey Service. Firsthand narratives of deep-sea adventures, c. 1887-1918.

DYKE, GWENETH, The Finances of a Sixteenth Century Navigator, Thomas Cavendish of Trimley in Suffolk, 8 pp. *Mariner's Mirror*, May.

FRANK, JOHN, Humber Keels, II, 22 pp. *Mariner's Mirror*, Aug. See also Rhodes, XVIII, 90.

Homeward Bound, An Irregular Journal, 14 pp. *Sea Breezes*, July, Aug. Ship's journal, 'garrulous as well as sophisticated,' issued on homeward-bound clipper 'Sobaron' from Sydney to London in 1882. To be continued.

HURST, A. A., Grain in Bulk, 3 pp. *Sea Breezes*, Aug. Problems of stability in sailing vessels.

O'BRIEN, R. B., A Shipwreck to Remember, 4 pp. *Rudder*, Jan. Loss of bark 'Craigburn,' bound from Melbourne to Wellington in May 1891, when drunken master, on a lee shore, refused aid of tugs.

WILDE, JANE, Creation of the Marine Department of the Board of Trade. *Journal of Transport History*, Nov. 1956.

WIRTH, H. G., et al., Last Voyage of the 'Pamir,' 6 pp. *Reader's Digest*, June. By one of the six survivors of the 86 aboard.

WOOLRIDGE, E., *The Wreck of the 'Maid of Athens'*, 159 pp. 3s 6d. London, Bles.

V. Fisheries and Whaling

BURGESS, R. H., The Fishing Craft of the Chesapeake Bay. *Commonwealth*, July. Description of types of craft used in Chesapeake fisheries.

— Maryland's Oyster Fleet. *Maine Coast Fisherman*, Aug. Picture story of sailing oyster fleet.

Captain Cook and his Act of Congress, 2 pp. *Old Dartmouth Hist. Soc. Bulletin*, Spring. New Bedford captain manages to secure American registry in 1900 for his Norwegian-built whaler 'Bowhead' after precarious operation under flags of Argentina and Chile.

DORAN, EDWIN, JR., The Caicos Conch Trade, 14 pp. *Geog. Rev.*, July.

EITCH, ADELAIDE, Home Port of the 'Bluenose,' 4 pp. *S&S*, Fall. Account of famous racing fishing schooner in terms of Lunenburg, N. S.

LODGE, R. J. H., Tenby Fishing Boats, 16 pp. *Mariner's Mirror*, May.

Notes on an Exhibition, see Sect. XIV.

REID, H., 'The Voyage All the Time Starts before Day in the Morning.' *S&S*, Fall. Role of 'run boat' in net fishing in Hampton Roads.

ROMAYNE, MARK, 'Atlantic Cowpunchers.' Rounding up Pothead Whales in Newfoundland, 4 pp. *The Beaver*, Summer.

VAN STONE, J. W., Commercial Whaling in the Arctic Ocean. *Pacific Northwest Quar.*, Jan.

VIa. Merchant Steam—North America

Big Tanker Economy, 1 p. *The Lamp* (Esso), Spring-Summer. 'On many routes, a single new tanker of superior size and speed is now doing the work formerly done by four or five T-2s. Above, say 70,000 tons there is less incentive to build larger ships since the potential economies are smaller.'

BROWN, A. C., Pilots First To Greet Mighty Liner on Her Annual Homecoming. *Daily Press* (Newport News), 5 Jan. Return of 'United States' to Newport News for overhaul.

— New Ferry Re-establishes Time-Honored Link with the Eastern Shore. *Ibid.*, 23 Feb. History of Old Point Comfort-Cape Charles service, with 10 pictures.

COVILL, W. K., The 'Commonwealth': A Fiftieth Anniversary Appreciation, 4 pp. *SBF*, June. History of the celebrated Fall River liner. See also XII, 75.

GERARD, JUNI, Search into History, 8 pp. *Newsday*, Jan. 8, 9. Story of the pioneer 'Savannah' and the quest for her remains on Fire Island under direction of Frank O. Braynard. See also Meyer Berger in *N. Y. Times*, 29 Jan., and *American Heritage*, June.

GRANBERG, W. J., Union Steamships, Ltd: Handy Man for the B. C. Coast, 7 pp. *S&S*, Fall.

LAND, E. S., USN, The 'Wheel-Horse' of World War II, 2 pp. *USNIP*, Aug. Superlatives and statis-

tics, concentrated in useful form, on the Liberty Ship by the admiral who directed its construction. See also Sect. IX.

NEWELL, GORDON, & WILLIAMSON, JOE, *Pacific Steamboats*, 196 pp. \$10.00. Seattle, Superior Pub. Co. Contains over 500 photographs.

SNIFFEN, H. S., Steam Ferries of Hampton Roads Have Plied for 140 Years. *Daily Press* (Newport News), 27 Oct. 1957. See also Brown above.

SUTHERLAND, R. T., JR., USN, et al., The U. S. Merchant Marine and Obsolescence, 4 pp. *USNIP*, July. Comments on Perry article by that title (XVIII, 57).

VIb. Merchant Steam—Other Regions

CARROTHERS, J. C., There Must Have Been a Third Ship! 14 pp. *USNIP*, July. Theory of cause of 'Andrea Doria-Stockholm' collision; condensed version in *Parade*, 10 Aug.

HIGGINS, TOM, Night in a Wheelhouse, 6 pp. *Sea Breezes*, June. Wreck of South African trawler 'Eclair' in 1939.

ISHERWOOD, J. H., 'Koning Willem II,' 4 pp. *Sea Breezes*, May. In Nederland Steamship Co. service to East Indies, 1900-1912, then Mediterranean service under French flag to 1934.

— The 'Ruahine' of 1909, 5 pp. *Ibid.*, June. New Zealand Shipping Co. liner, serving to 1949, then under Italian flag to 1957.

— The 'Empress of Asia,' 7 pp. *Ibid.*, July. CPR transpacific service, 1913-1940, bombed and burned as transport at Singapore, 1942.

— Cunard 'Arabia' of 1852, 4 pp. *Ibid.*, Aug. Line's last wooden liner, with voracious appetite for coal. All in his 'Steamers of the Past' series.

75 Years of Finnish Liner Traffic, 17 pp. *Sea Breezes*, Aug. History of Finland Steamship Co., with fleet list.

STOKER, R. B., Manchester Liners' Diamond Jubilee, 14 pp. *Sea Breezes*, July. Continues into post-war period line history given *ibid.*, May-July 1948; includes fleet list.

VERBURGH, C., The Economic Aspects of the Development of a South African Merchant Fleet, 8 pp. *Financial Trade Review* (South Africa), April-May 1957.

WRIGHT, C. A., Two 'Alacantas,' 7 pp. *Sea Breezes*, June. Royal Mail liners; the first, built 1913, was sunk by German raider in 1916; the second served from 1927 to 1958.

VII. Inland Navigation

BAIN, J. W., Surveys of a Water Route between Lake Simcoe and the Ottawa River by the Royal Engineers, 1819-1827. *Ontario History*, Winter 1957.

BOARD OF ENGINEERS FOR RIVERS & HARBORS, *Transportation Lines on the Great Lakes System*, 1958, 83 pp., paper, 60 cents. Washington, GPO.

BROWN, A. C., Position of Ferryman Gradually Passing from Virginia Scene. *Daily Press* (Newport News), 27 Jan. 1957. Includes account and pictures of cable ferries on upper James River.

COWLEY, ROBERT, ed., Sailor with a Paintbrush, 8 pp. *American Heritage*, Aug. Reproductions in color of numerous paintings of early Great Lakes steamers, painted during the 1870's by Captain James Van Cleve, a retired shipmaster.

FLEMING, R. F., Propeller 'Independence' Wrecked on Lake Superior November 1853, 4 pp. *Inland Seas*, Summer.

HEYL, ERIK, The 'Wilmington-Provincial,' Atlantic Coastal Steamer and Toronto Yacht Clubhouse, 4 pp. *Ontario History*, Spring.

HORNE, GEORGE, et al., The Meaning of the Seaway to Shipping and Shipyards. *N. Y. Times*, 29 June, xi, 3 ff. Part of 22-page section on St. Lawrence Seaway; includes diagrams indicating lock operation, etc. Other pertinent articles in section include P. J. C. Friedlander on Seaway in general, p. 1; E. A. Morrow, Coast Ports Reassess Seaway Competition, p. 6; Seaway's Effect on Lake Ports, pp. 10-11; A. H. Raskin, Industry's New High Road, p. 12; Gene Smith, Toll Proposals Stir Controversy; Clark Davey, Labrador's Ore to Aid the Seaway, p. 16; Raymond Walters, Jr., The Long Search for a Northwest Passage, p. 20. Much additional information in section's advertisements. Also (*ibid.*, v, 11) George Horne, Seaway is Posing a Pilot Problem.

HUNN, MAX, The 'Gordon C. Greene' Lives On, 2 pp. *S&S*, Fall. Old river packet, now known as the 'River Queen.'

MACDONALD, R. J., The Erie and Port Dover Ferry, 3 pp. *SBF*, June.

POSIE, D. E., The Georgian Bay Line, 3 pp. *Niagara Frontier*, Spring.

PRESTON, R. A., Broad Pennants on Point Frederick, 10 pp. *Ontario History*, Spring. History of British naval command on Great Lakes, reprinted from *RMC Review* (Royal Military College).

REEVES, H. F., New Cargo Capacity by the Inch, 5 pp. *SCS*, Fall. Dredging in the Detroit River.

RICE, DUNCAN, The Straits of Mackinac Ferries, 7 pp. *Indian Seas*, Summer.

WAGGONER, M. S., *The Long Haul West: The Great Canal Era, 1817-1850*, 320 pp. \$5.75. New York, Putnam.

VIII. Ports and Coastal Areas

ANGELL, ORSON, The Eastern Shore. *The Lamp* (Esso), Spring-Summer. Includes seven water-color views by Amy Jones.

BROWN, A. C., Army Engineers' Dredge Widens Approaches to Hampton Roads. *Daily Press* (Newport News), 21 April 1957. With 11 illustrations.

BURGESS, R. H., see Sect. XIV.

CUNNINGHAM, J. T., *The New Jersey Shore*, 272 pp. \$5.00. New Brunswick, Rutgers Univ. Press.

HALLET, RICHARD, The Deep Roots of Boothbay Harbor, 6 pp. *Down East*, Aug.

HORNE, GEORGE, see Sect. VII.

KIRCHNER, D. P., USN, American Harbor Defense Forts, 9 pp. *USNIP*, Aug. Evolution from colonial times: pictorial section.

MACNELL, B. D., *The Hatterasman*, 276 pp. \$5.00. Winston-Salem, N. C., John F. Blair. History and description of the inhabitants of the North Carolina 'outer banks' area.

The Mersey 70 Years Ago, 4 pp. *Sea Breezes*, June. Five photographs of Liverpool waterfront.

PENROSE, CHARLES, JR., 'They Live on a Rock in the Sea!' *The Isles of Shoals in Colonial Days*, 48 pp. New York, etc., Newcomen Society, 1957.

REES, HENRY, *British Ports and Shipping*, 304 pp. 18s. London, Harrap.

STROTH, ROBERT, It's Boom Time on the Lower Mississippi, 5 pp. *Reader's Digest*, June. Effect of rapid industrial development on ports of New Orleans and Baton Rouge.

IX. Shipbuilding and Allied Topics

BRABAND, AGNES, Shipyard's Heavy Shop Work Depicted in Museum Paintings. *Daily Press* (Newport News), 7 Oct. 1956. Reproduction of six Thomas C. Skinner murals at Mariners' Museum, showing processes at great Newport News yard.

LAND, E. S., USN, *Winning the War with Ships: Land, Sea, and Air—Mostly Land*, 310 pp. \$4.75. New York, McBride. Autobiography of colorful naval constructor, onetime Chief of Bureau of Construction & Repair and wartime head of Maritime Commission. See also Sect. VIa.

PARKHURST, C. E., Progress of Construction of Superliner Shown in Drawings. *Daily Press* (Newport News), 24 June 1956. Twelve drawings made for Gibbs & Cox, showing stages in building of 'United States' at Newport News.

SALISBURY, W., & ANDERSON, R. C., ed., *A Treatise on Shipbuilding and a Treatise on Rigging, written about 1620-1625* (Society of Nautical Research, Occasional Publications No. 6), 63 pp. Greenwich, The Society.

SLOOT, W. F., Some Aspects of Naval Architecture in the Eighteenth Century, 12 pp. London, Institution of Naval Architects. Paper read at summer meeting of the Institute. The author, in Ship Research Dept. of Lloyd's Register of Shipping, gives brief account of the development of mathematics and mechanics and of theoretical naval architecture at the period, with particular attention to stability, strength of ships, and model testing.

SWINFIELD, ARTHUR, Training Papuans as Boat-Builders, 4 pp. *SPC Quarterly* (South Pacific Commission), April.

X. Naval to 1939—North America

BALDWIN, H. W., The End of the Wine Mess, 10 pp. *USNIP*, Aug. Circumstances surrounding Secretary Danieis' General Order No. 99 of 1 June 1944, including verse arising from the affair.

BALINSKY, A. S., Albert Gallatin, Naval Foe, 12 pp. *Pa. Mag. of Hist. & Biog.*, July. Influence of Jefferson's Secretary of the Treasury.

BRADLEY, C. D., President Lincoln's Campaign against the 'Merrimac,' 27 pp. *Jour. Illinois State Hist. Soc.*, Spring.

330 RECENT WRITINGS IN MARITIME HISTORY

BROWN, A. C., The U. S. Gunboat 'Nashville'; The Ship that Fired the First Shot of the Spanish-American War, 3 pp. *USNIP*, June. See also XVIII, 96.

CAMPBELL, ALEC, The Spanish-American War, 1898, 9 pp. *History Today*, April. See also Freidel below.

DEGNAN, J. L., JR., USN, Oiler Parade, 10 pp. *USNIP*, Sept. Historical evolution, shown in 19 pictures with brief comments.

FREIDEL, FRANK, *The Splendid Little War*, 314 pp. \$8.50. Boston, Little, Brown. A pictorial history of the Spanish-American War with text including many firsthand quotations; like Millis's *The Martial Spirit*, it catches the 'feel' of that profitable but at times uncomfortable short war.

GANNON, J. C., *The USS 'Oregon' and the Battle of Santiago*, 62 pp. \$3.00. New York, Comet Press. Recollections.

GILPIN, A. R., *The War of 1812 in the Old Northwest*, 286 pp. \$6.50. East Lansing, Michigan State Univ. Press. Meticulously detailed account, including naval aspects.

LANNI, C. G., David Foote Sellers, 2 pp. *Shipmate*, Aug. Biographical sketch of the C-in-C, U. S. Fleet, 1933-1934.

LIVERMORE, S. W., The American Navy as a Factor in World Politics, 1903-1913, 17 pp. *American Hist. Rev.*, July. Based on his valuable Ms. Harvard Ph.D. thesis, *American Naval Development, 1868-1914, with special reference to Foreign Affairs* (XII, 83); see also Braisted, XVIII, 262.

METCALF, C. S., Daniel Dobbins, Sailing Master, USN, Commodore Perry's Right Hand Man, 9 pp. *Inland Seas*, Summer. To be continued.

OWEN, J. H., RN, et al., Lieutenant Edward Sneyd, Royal Navy, of Keele Hall, Staffordshire, 4 pp. *Mariner's Mirror*, Aug. His command, the armed brig 'Bolton,' was captured by American squadron near Block Island, 5 April 1776.

'A PARTICIPANT,' pseud., The Around the World Cruise, December 1907-February 1909, 2 pp. *Shipmate*, Aug.

FOHNING, A. A., When the Confederates 'Invaded' Portland. *Portland* (Me.) *Sunday Telegram*, 18 May. Seizure of revenue cutter 'Caleb Cushing' by force from raider 'Florida.'

LITTLE, C. H., RCN, The Influence of Sea Power on the Conquest of Canada (Occasional Papers, No. 1), Halifax, Maritime Museum of Canada.

RUCKER, G. G., USN, et al., McCarty: Famous and Beloved Jimmylegs, 2 pp. *Shipmate*, Aug. Anecdotes of fabulous master-at-arms at Naval Academy.

SCHIRATZ, PAUL, The Influence of Sea Power in History, 1 p. *Shipmate*, Aug. Threat to close Norfolk Navy Yard in 1868 because of anti-Union inscription in Trinity Episcopal Church.

Search Planned for Cortes' Ships. *New York Times*, 29 June, 1, 25, 'Skin Divers Seek to find whether Conqueror of Mexico sank Fleet.'

SMELSER, MARSHALL, The Passage of the Naval Act of 1794, 12 pp. *Military Affairs*, May. See also XVIII, 96-97.

SNOW, E. F., Follow the Leader, 6 pp. 55-56, Fall. Story of the loss of seven destroyers near Santa Barbara, 8 Sept. 1923. See also Hadaway, XVII, 164.

U. S. Naval Air Station, North Island, 10 pp. *USNIP*, July. Picture article of original Glenn Curtiss site at San Diego, developed by Navy at end of World War I.

WEST, R. S., JR., Lincoln's Hand in Naval Matters, 8 pp. *Civil War Hist.*, June. See also XVIII, 97.

XI. Naval to 1939—Other Regions

BOXER, C. R., Ledger and Sword: Cornelius Speelman and the Growth of Dutch Power in Indonesia, 1666-1684, 10 pp. *History Today*, March. One more valuable Boxer contribution to maritime history, based on his use of Dutch and Portuguese sources.

KEEVIL, J. J., RN, *Medicine and the Navy, 1200-1900; Vol. I, 1200-1649*, 242 pp. Edinburgh and London, Livingstone. See 6-page review in *Mariner's Mirror*, Aug.

LAUGHTON, L. G. C., English and Spanish Tonnage in 1588, 4 pp. *Mariner's Mirror*, May.

MACDERMOTT, A., RN, Guns and Gunners of Olden Times, 3 pp. *Mariner's Mirror*, May.

——— The 'Santa Ana,' 1533, 1 p. *Ibid.*, Aug. Translation of description of new great warship of the Order of St. John, in the Mediterranean.

MACINTYRE, DONALD, RN, *Jutland*, 282 pp. \$3.95. New York, Norton. Described as 'a small masterpiece of compression and concise naval reporting' of the great controversial encounter.

MARSHALL, M. A. N., The Hired Armed Ships of Kent, 6 pp. *Mariner's Mirror*, Aug. Details of vessels hired as auxiliaries to the Fleet, 1803-1815.

MAY, W. E., RN, The Honeymoon Voyages of 1764, 5 pp. *Mariner's Mirror*, May. Admiralty records of naval yachts carrying the Prince of Brunswick and his bride, Augusta, sister of George III (in separate vessels) from Harwich to Holland.

POWERS, R. D., Jr., USN, Blockade: For Winning Without Killing, 6 pp. *USNIP*, Aug. Development of concept.

PRESTON, R. A., see Sect. VII.

RAWSON, GEOFREY, RAN, *Sea Prelude*, 260 pp., 18s. Edinburgh, Blackwood. Reminiscences of early naval career, particularly in the Royal Indian Marine.

READE, LESLIE, Bombs over Venice, 5 pp. *History Today*, June. 'The first attempt to bomb a city from the air,' using balloons loosed from Austrian warships in 1849.

SPENCER, FRANK, Lord Sandwich, Russian Masts, and American Independence, 12 pp. *Mariner's Mirror*, May. Unfortunate consequences of failure to accept Russia's offer in 1765 to include masts in contraband list.

SPINNEY, J. D., The 'Hermione' Mutiny, 4 pp. *Mariner's Mirror*, May. In addition to his original account (NV, 319), author adds lengthy memorandum by one of the surviving officers.

XII. World War II

BELL, PHILIP, Great Britain and the French Fleet, June-July 1940. *Aberdeen Univ. Rev.*, Spring 1957.

BIDLINGMAIER, T. G., FGN, Exploits and End of the Battleship 'Bismarck,' 12 pp. *USNIP*, July.

COCCIA, ALDO, IN, *The Hunters and the Hunted*, 178 pp., \$3.50. Annapolis, U. S. Naval Institute. Stories of the Italian Navy, by a rear admiral. One chapter, 'Italian Submarines and their Bordeaux Base,' reproduced in *USNIP*, June.

FIORAVANZO, GIUSEPPI, IN, Italian Strategy in the Mediterranean, 1940-1943, 9 pp. *USNIP*, Sept.

GILL, G. H., *Royal Australian Navy, 1939-42* (Australia in the War), 686 pp., 30s. Canberra, Angus & Robertson.

LAND, E. S., see Sect. VIa, IX.

LIDDELL-HART, B. H., How and Why Hitler Pounced on Norway, 8 pp. *Marine Corps Gazette*, July.

MATLOFF, MAURICE, Was the Invasion of Southern France a Blunder? 11 pp. *USNIP*, July. Includes discussion of Churchill's Balkan alternative.

NEWCOMB, R. F., *Abandon Ship: Death of the U.S.S. 'Indianapolis'*, 305 pp., \$3.95. New York, Holt. Account of the torpedoing of the cruiser in the Pacific in the last days of the war, with analysis of blunders responsible for much of the heavy loss of life.

ROBERTSON, TERENCE, *Channel Dash: The Fantastic Story of the German Battle Fleet's Escape through English Channel in Broad Daylight*, 208 pp., \$1.00. New York, Dutton.

TAYLOR, THEODORE, USNR, A Matter of Judgment. *USNIP*, July. Capture of 'City of Flint' by 'Deutschland' in October 1939.

WATT, D. C., Anglo-German Naval Negotiation on the Eve of the Second World War, Pt. 1, 7 pp. *RUSI*, Spring.

XIII. Postwar Naval

BIDLINGMAIER, T. G., FGN, The Strategic Importance of the Baltic Sea, 10 pp. *USNIP*, Sept.

BOWEN, H. G., Oiler-Command, a Rewarding Deep-Draft Experience, 7 pp. *USNIP*, Sept. See also Brinkloe & Degnan.

BRINKLOE, W. D., USN, The 'Forrestal'-Class Attack Carrier, 2 pp. *USNIP*, July. The Fleet Oiler, 3 pp. *Ibid.*, Sept.

BROWN, J. A., USN, Ocean Radar Station Ship. *USNIP*, Aug.

DUN, HAYWARD, The Pakistan Navy, 6 pp. *USNIP*, Sept.

GORDON, G. V., USN, The Royal Netherlands Navy, 15 pp. *USNIP*, June.

KASSELL, B. M., USN, Marine Engineering Notes from the Soviet Press. *Jour. American Soc. of Naval Engineers*, May.

GUILL, J. H., USNR, The 'Lemn' and the Soviet Grand Design for the Arctic, 6 pp. *USNIP*, July. Potentialities of the nuclear-powered icebreaker.

HESSLER, W. A., Sixth Fleet: Beefed Up for a Bigger Job, 8 pp. *USNIP*, Aug.

332 RECENT WRITINGS IN MARITIME HISTORY

KENNEDY, W. V., Northeastern Siberia: The Back Door to Russia, 6 pp. *USNIP*, Aug.

KINTNER, W. R., et al., *Forging a New Sword: A Study of the Department of Defense*, 252 pp. \$1.50. New York, Harper.

KRULAK, V. H., USMC, The Inchon Operation, 5 pp. *Shipmate*, Sept.

New Power for the Navy Underseas, 8 pp. *Life*, 1 Sept.

RAWSON, GEOFFREY, Problems of Australian Defense, 15 pp. *USNIP*, June.

WILSON, G. A. M., RN, The Development of Nuclear Power for Marine Purposes, 12 pp. *RUSI*, May.

XYDÉS, S. G., The Genesis of the Sixth Fleet, 12 pp. *USNIP*, Aug. Based on Ph.D. thesis, already noted.

XIV. *Marine Art, Ship Models, Collections, Exhibits*

BRABAND, AGNES, see Sect. IX.

BURGESS, R. H., Chesapeake Bay and Tidewater Areas Featured by Museum. *Daily Press* (Newport News), 26 May 1957.

— Museum Marks Centennial of First Trans-atlantic Cable Message. *Ibid.*, 3 Aug. 1958. By curator of exhibits at Mariners' Museum.

HILL, H. O., RN, A Note on the National Maritime Museum's Photographic Collection, 1 p. *Mariner's Mirror*, Aug.

— *The Instruments of Navigation*, 4s 6d. London, HMSO for National Maritime Museum. Primarily a catalogue of navigational instruments in the museum, by their curator.

Marine Past is Recreated: Penobscot Museum One of Greatest. *Portland (Me.) Sunday Telegram*, 10 Aug. Penobscot Marine Museum, Searsport, Maine.

Notes on an Exhibition, 3 pp. *Old Dartmouth Hist. Soc. Bull.* Account of Benjamin Russell in connection with exhibit of 11 of his prints and 44 original water colors of whaleships and whaling.

PORTERFIELD, BYRON, Long Island Man Rebuilds Early Submarine. *N. Y. Times*, 25 May, v. 14. Scale model of 'Holland' being built for Mariners' Museum by Floyd D. Houston.

SNIFFEN, H. S., Museum Observes 150th Anniversary of Steam. *Daily Press* (Newport News), 18 Aug. 1957. Special exhibit on 'Clermont' at Mariners' Museum.

WARNER, OLIVER, ed., *Sailing Ships*. 35s. London, Ariel Press. 12 colored prints of nineteenth-century sailing vessels.

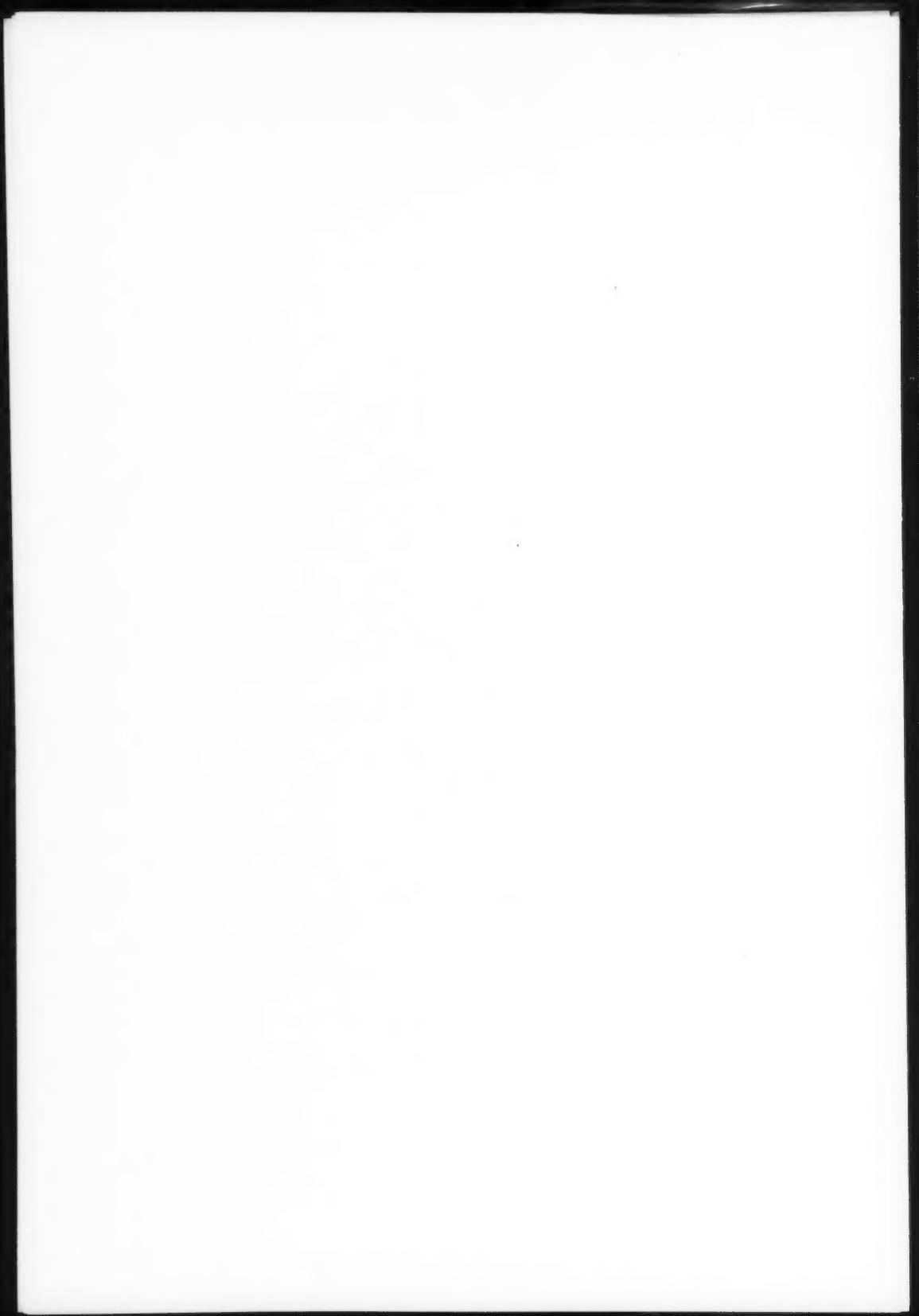
XV. *Bibliography*

HURFORD, G. H., Sixty Years of 'Janes,' 7 pp. *RUSI*, May.

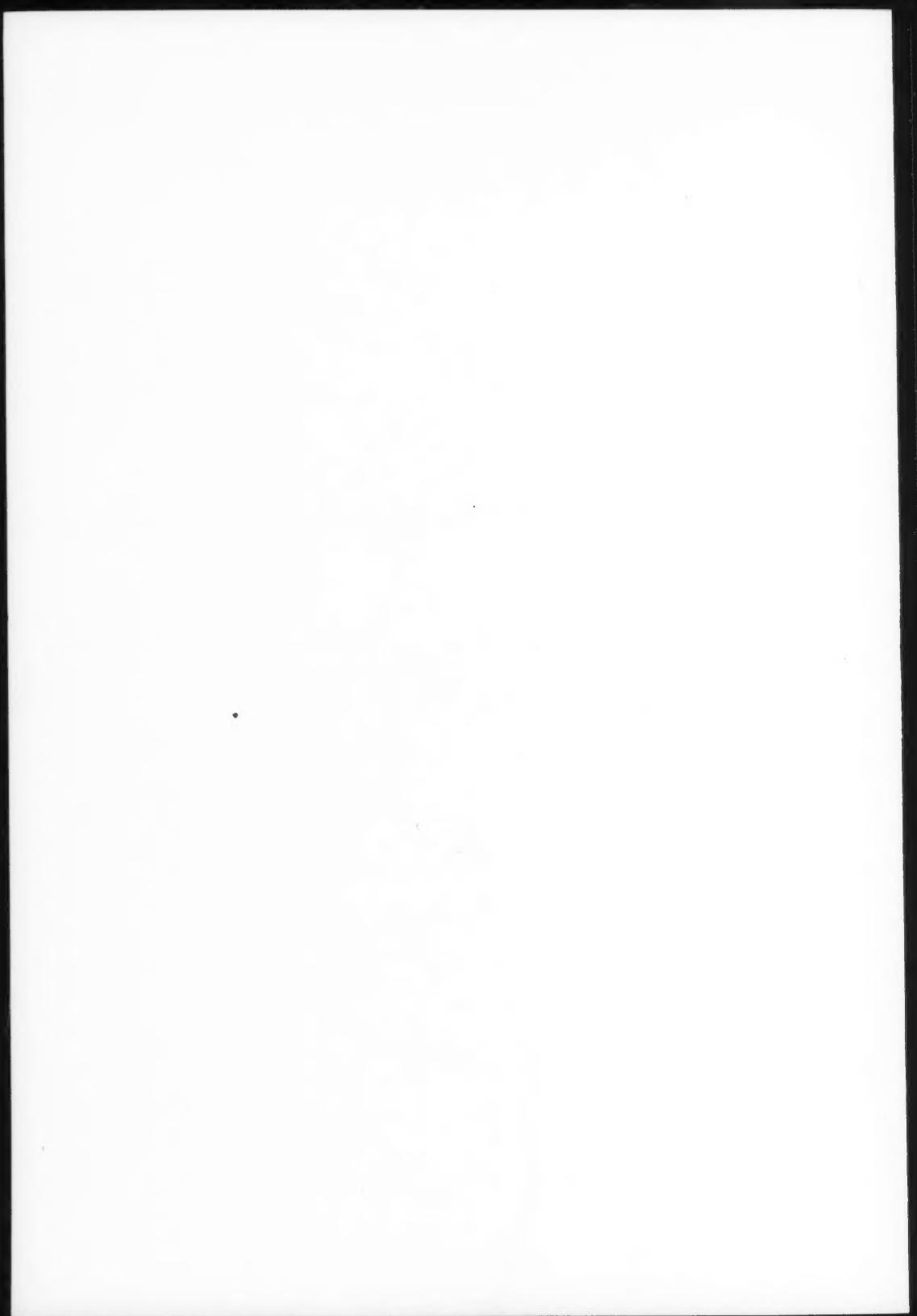
KNIGHT, FRANK, *The Sea Story*, \$5.50. London, Macmillan; New York, St. Martins. A guide to nautical reading from ancient times to the present.

REINGOLD, NATHAN, *Records of the Coast and Geodetic Survey* (Preliminary Inventories, No. 105), 83 pp., paper. Washington, National Archives.

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